

(NASA-TM-80195) TRANSONIC PRESSURE AND LOAD
DISTRIBUTIONS FOR A GROUP OF SIMULATED
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SUMMARY

Results in the form of pressure and load distributions for a related group of simulated launch vehicle configurations are presented. The configurations were selected so that the nose-cone and interstage transition-flare components were relatively close to one another and subject to mutual interference effects. Tests extended over a Mach number range from 0.40 to 1.20 at angles of attack from 0° to about 10° . The test Reynolds numbers, based on main stage diameter, were of the order of 0.98×10^6 .

INTRODUCTION

In the past, considerable experimental effort has been directed to the determination of aerodynamic force, moment, and loading characteristics for launch vehicle configurations. (See refs. 1 to 10.) This experimental effort was required, in part, because of the lack of suitable theoretical methods which could be used to predict vehicle aerodynamic characteristics with the required accuracy, particularly in the transonic speed range. Also, the available experimental results were applied in the development of empirical methods which could be used to make relatively rapid estimates of aerodynamic load distributions for some launch vehicle configurations. (See ref. 3, for example.) The empirical methods were limited in their application, however, to cone-cylinders or to configurations having no local flow separation. More recently, analytical methods have become available. (See ref. 11, for example.) The analytical approaches, however, are generally restricted to cases for attached flows.

As part of the experimental effort noted earlier, investigations have been conducted in the Langley 8-Foot Transonic Pressure Tunnel and the Langley Unitary Plan Wind Tunnel in order to determine the effects on force, moment, and loading characteristics of systematic variations in the geometry for simulated launch vehicles. Results for a number of configurations for which the nose-cone and stage transition-flare components were separated by a cylinder of relatively high fineness ratio are available in references 5 to 9.

The investigation was conducted in the Langley 8-Foot Transonic Pressure Tunnel in order to determine the effects of systematic variations in geometry on the load distributions of a number of configurations for which the nose-cone and stage transition-flare components were located relatively close to one another and were, therefore, subject to mutual interference effects which, in many cases, caused flow separation to occur. The tests extended over a Mach number range from 0.40 to 1.20 and angles of attack from 0° to about 10° . Test Reynolds numbers, based on the main stage diameter, were of the order of 0.98×10^6 . Transonic force and moment results for a number of identical configurations are given in reference 10.

SYMBOLS

Values are given in both SI and U.S. Customary Units. Measurements for this investigation were taken in U.S. Customary Units. Details concerning the use of SI Units, together with physical constants and conversion factors, are given in reference 12.

C_n	body section normal-force coefficient, $\int_0^1 (C_{p,l} - C_{p,u}) d\left(\frac{y}{r}\right)$
C_p	pressure coefficient, $\frac{p_l - p}{q}$
D	local diameter, cm (in.)
D_{ref}	main-stage diameter, 7.87 cm (3.10 in.)
l	model reference length, 127 cm (50 in.)
M	Mach number
p	free-stream static pressure, Pa (lb/ft ²)
p_l	local static pressure, Pa (lb/ft ²)
q	free-stream dynamic pressure, Pa (lb/ft ²)
$q_{M=1.20}$	free-stream dynamic pressure at $M = 1.20$, Pa (lb/ft ²)
R	Reynolds number based on main-stage diameter
r	local body radius, cm (in.)
x	longitudinal distance, measured from reference station 0 ahead of body, cm (in.)
y	lateral distance, measured from body center line, cm (in.)
α	true angle of attack, deg
α_{nom}	nominal angle of attack of model center line (does not include corrections for deflection of model and support system due to load), deg
δ_F	transition-flare half-angle, deg
δ_N	nose-cone half-angle, deg

ϕ orifice row meridian angle, measured clockwise from the vertical
as viewed from front, deg

Subscripts:

l lower

u upper

APPARATUS AND TESTS

Tunnel

The investigation was conducted in the Langley 8-Foot Transonic Pressure Tunnel. This facility is a single-return, rectangular, slotted-throat tunnel with controls that allow for the independent variation of Mach number, density, temperature, and humidity. The tunnel is designed to obtain aerodynamic data for speeds up to and through the speed of sound while minimizing the usual effects of blockage.

Model

The model used for the investigation was the variable-geometry model described in reference 5. For this investigation, the upper-stage cylinder fineness ratio was held constant at 1.42 for most configurations, and nose cones having half-angles from 15.3° to 30.0° were each tested in combination with interstage transition flares having half-angles from 5.0° to 30.0° . In addition, for one set of nose-cone and transition-flare components, the upper-stage fineness ratio was varied from 1.42 to 0. To aid the reader, model configurations are designated by a three-digit number according to the following arrangement:

First digit - nose-cone half-angle:

1	15.3°
2	22.5°
3	30.0°

Second digit - upper-stage fineness ratio:

2	1.42
3	.96
4	.50
5	0

Third digit - stage transition-flare half-angles:

1	5.0°
2	10.1°
3	15.0°
4	30.0°

For example, configuration 321 has a nose-cone half-angle of 30.0°, an upper-stage fineness ratio of 1.42, and a stage transition-flare half-angle of 5.0°. Model configurations are also listed in table 1.

Model pressure orifices were installed along four longitudinal rows which were located at meridian angles (measured clockwise from the vertical as viewed from the front) of 0°, 30°, 60°, and 90°. All orifice locations, which are indicated nondimensionally in the tables of results, are referenced to model station 0 which was located 127 cm (50 in.) forward of the model base. (See fig. 1(b).)

Tests and Procedure

The investigation was conducted at a stagnation pressure maintained at approximately 101.5 kPa (2120 lb/ft²). All configurations were tested at an angle of attack of 0° through a Mach number range from 0.40 to 1.20. Results were also obtained over an angle-of-attack range from -10° to 10° at Mach numbers of 0.60, 0.80, 1.00, and 1.20. Average test Reynolds numbers and dynamic pressures are given in figure 2.

The investigation was conducted with a transition strip located at the juncture of the nose cone and upper stage. The transition strip was 0.254 cm (0.1 in.) wide and was composed of No. 80 carborundum grains set in a plastic adhesive.

Model pressures were measured by the use of six scanning valve units. Differential pressure transducers were utilized, with ranges selected to provide nearly maximum gage outputs for the expected maximum pressure levels. No force or moment measurements were made during this investigation.

Boundary Interference Effects

At the time of the wind-tunnel investigation, the effects of subsonic boundary interference in the slotted test section were considered negligible. More recently, however, boundary-wall interference effects have been identified at Mach numbers close to 1.00. (See ref. 13.) These effects approach a maximum at a Mach number of 1.00; however, on the basis of the results of reference 13, they are confined to the rearward 50 percent of the bodies tested. For this investigation, therefore, the variations in loads over the regions of primary interest are judged to be valid at a Mach number of 1.00. At supersonic speeds,

the experimental results are generally affected by boundary-reflected disturbances which occur at Mach numbers from slightly over 1.00 to those at which disturbances are reflected downstream of the model base. For this investigation, the model lengths were such that no reflected disturbances affected the results at a Mach number of 1.20. Schlieren photographs, however, and an examination of the results indicate that a disturbance originating at the tunnel wall has a slight but noticeable effect on the pressure distributions at a Mach number of 1.20 at model stations between about $x/l = 0.82$ and $x/l = 0.86$. Because this effect is slight and occurs well to the rear of the model components which were varied, it is judged to be negligible in configuration comparisons.

CORRECTIONS AND ACCURACY

Angles of attack presented in this paper should be considered as nominal angles for this reason: although corrections have been made for tunnel airflow angularity, none have been applied for deflections of the model and support system under load. Estimates of the true angles of attack can be made, however, based upon the static loadings of reference 7 and the force and moment characteristics for the present configurations given in reference 10. The true angle of attack may be determined (to within $\pm 0.1^\circ$) from the empirical expression

$$\alpha = \alpha_{\text{nom}} \left(1 + 0.015 \frac{q}{q_{M=1.20}} \right)$$

where the values of dynamic pressure are obtained from figure 2.

A consideration of factors affecting the results of this investigation has indicated that pressure coefficients are generally accurate within ± 0.01 . However, in model regions of extremely varying pressures (for example, in the region of the juncture of the nose cone and upper stage or for conditions in which pressures are noticeably sensitive to small Mach number changes, such accuracies may not be expected. (See fig. 3.) Local deviations from the quoted free-stream Mach numbers did not exceed ± 0.015 .

DISCUSSION OF RESULTS.

Results of this investigation are presented as pressure coefficients (tables 2 to 15) and section normal-force coefficients (tables 16 to 26). Since the orifice rows extended only 90° radially about the model, section normal-force coefficients were obtained by combining pressure distribution results at identical positive and negative angles of attack. Representative data from the tables have been selected for graphical presentation (figs. 4 to 10) and are plotted to show the general effects of configuration variables on the pressure coefficients and on the section normal-force coefficients (multiplied by a diameter ratio to give load distributions).

Pressure Distributions

Effect of nose angle, $\alpha = 0^\circ$.— The effects of a variation in nose-cone angle on the longitudinal pressure distributions are presented in figure 4 for configurations having stage transition-flare angles ranging from 5.0° to 30.0° . For the lowest stage transition-flare angle ($\delta_F = 5^\circ$, fig. 4(a)), the effects of varying nose-cone angle are relatively slight; the most noticeable result is a broadening of the negative pressure-coefficient peaks just downstream of the juncture of the nose cone and upper stage at Mach numbers of 0.80 and 0.90 as nose-cone angle is increased. As noted in reference 5, the broadening of these peaks is associated with increases in separation as the nose-cone angle and associated adverse pressure gradient are increased.

As the stage transition-flare angle is increased to 30.0° (figs. 4(b) to 4(d)), the effects are greatly amplified because of the increased adverse pressure gradients resulting from the flare-angle increase. In the extreme case, a significant region of separated flow is evident for configuration 324 ($\delta_N = 30^\circ$, $\delta_F = 30^\circ$) at a Mach number of 0.90 just downstream of the nose-cone juncture. (See fig. 4(d).) Separation is also evident just downstream of the juncture of the transition flare and main stage at a Mach number of 0.90. This separation is indicated by the broadening of the associated peaks for all transition-flare angles and for nose-cone half-angles of 15.0° and 22.5° . (See figs. 4(b) to 4(d).) The configurations which exhibit the greatest degree of separation downstream of the juncture of the nose cone and upper stage appear to have the least amount of separation downstream of the juncture of the stage transition flare and the main stage. (See fig. 4(d) where $M = 0.90$, for example.) This characteristic results from the fact that for low nose-cone angles, the flow apparently remains attached over the upper-stage surface. Therefore, the full effect of the transition-flare compression and overexpansion is felt, and an adverse pressure gradient severe enough to separate the flow downstream of the juncture of the transition flare and the main stage results. For the higher nose-cone angles, separation over the upper stage tends to mask the effect of the transition flare, so that from an aerodynamic standpoint, the flow acts as if it were approaching a transition flare of a significantly lower angle and probably reattaches at the corner between the transition flare and the main stage.

Effects of angle of attack.— The effects of a variation in angle of attack from -6° to 6° on the pressure coefficients in the top row ($\phi = 0^\circ$) are presented in figures 5 to 8. For a transition-flare angle of 5° , pressure distributions at angles of attack from -6° to 6° are very similar to those at 0° and show little variation in characteristics as Mach number is varied (figs. 5(a) to 8(a)). As the transition-flare angle is increased to 10.1° , however, a noticeable broadening of the pressure-coefficient peak for the nose cone and upper stage occurs. This broadening, indicative of separation, appears as the angle of attack is increased to 3° and 6° (figs. 7(b) and 8(b)).

Generally, increases in stage transition-flare angle to 15.0° and 30.0° result in an earlier onset of the noted separation effects with regard to both angle of attack and Mach number. For the higher flare angles, separation on the main stage becomes apparent at the higher Mach numbers. (See figs. 7(c) and 8(c), for example, at Mach numbers of 1.00 and 1.20.)

Loading Distributions

The effects of variations in nose-cone angle on the load distributions for angles of attack of 3° and 6° are presented in figures 9 and 10, respectively. As expected, the nose-cone and transition-flare components carry the greater portion of the loading. For configurations which experience a significant degree of separation (see, for example, configuration 324 at a Mach number of 0.80, fig. 10(d)), a notable portion of the load is carried by the upper stage.

SUMMARY OF RESULTS

Results of this investigation are presented as pressure coefficients and section normal-force coefficients. At low stage transition-flare angles, effects of varying nose-cone angle are slight. As stage transition-flare angle is increased, significant regions of flow separation occur. These regions are associated with increased adverse pressure gradients. Generally, increases in stage transition-flare angle to 30.0° result in an earlier onset of the noted separation effects with regard to both angle of attack and Mach number.

Langley Research Center
National Aeronautics and Space Administration
Hampton, VA 23665
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TABLE 1.- MODEL CONFIGURATIONS

Configuration	Nose-cone half-angle, deg	Upper-stage fineness ratio	Transition-flare half-angle, deg
121	15.3	1.42	5.0
221	22.5	↓	↓
321	30.0		↓
122	15.3		10.1
222	22.5		↓
322	30.0		↓
123	15.3		15.0
223	22.5		↓
323	30.0		↓
124	15.3	↓	30.0
324	30.0		30.0
133	15.3	.96	15.0
143	↓	.50	↓
153	↓	0	↓

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

x/l		C_p for -					
		$\beta = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Nose	.328	.251	.282	.289	.312	.329	.356
	.332	.229	.251	.257	.281	.300	.328
	.348	.196	.220	.225	.250	.271	.301
	.358	.163	.176	.180	.208	.231	.267
	.378	.065	.075	.080	.115	.147	.192
Upper stage	.368	-.045	-.037	-.026	.031	.078	.131
	.393	-.169	-.179	-.156	-.057	.006	.072
	.399	-.857	-1.273	-1.287	-.968	-.830	-.697
	.404	-.224	-.301	-.408	-.992	-.916	-.798
	.409	-.123	-.155	-.192	-.396	-.809	-.709
Transition	.419	-.045	-.055	-.059	-.103	-.198	-.553
	.429	-.000	-.010	-.014	.018	.007	-.416
	.439	.022	.027	.024	.043	.088	-.012
	.449	.067	.072	.070	.083	.121	.135
	.459	.179	.191	.150	.200	.225	.243
Main stage	.482	.055	.058	.056	.060	.076	.133
	.492	.033	.035	.032	.036	.043	.092
	.512	.033	.026	.015	.018	.023	.034
	.532	.011	-.005	-.009	-.017	-.010	.020
	.552	-.045	-.056	-.064	-.079	-.078	-.037
Transition	.562	-.079	-.106	-.118	-.144	-.156	-.111
	.568	-.169	-.220	-.234	-.304	-.448	-.417
	.577	-.068	-.092	-.101	-.125	-.131	.357
	.587	-.045	-.056	-.064	-.078	.077	.283
	.597	-.034	-.037	-.047	-.057	.057	.117
Main stage	.607	-.023	-.024	-.034	-.046	.044	.021
	.617	-.023	-.024	-.030	-.046	.037	.012
	.627	-.023	-.019	-.026	-.032	.034	-.009
	.637	.000	-.010	-.018	-.028	.023	-.009
	.657	.000	.004	.008	-.022	.016	-.010
Transition	.677	.000	.005	.008	.017	.013	.013
	.697	.004	.009	.005	.011	.011	.012
	.737	.008	.013	.000	.009	.010	.013
	.777	.008	.010	.004	.005	.005	.010
	.785	.011	.016	.005	.002	.002	.005
Main stage	.817	.009	.008	.004	.003	.003	.005
	.857	.006	.005	.000	.006	.006	.009
	.877	.006	.001	.001	.006	.006	.008
	.897	.004	.002	-.003	-.009	-.009	.012

x/l		C_p for -					
		$\beta = -30^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Nose	.338	.229	.242	.249	.267	.290	.319
	.348	.185	.203	.213	.236	.257	.288
	.358	.152	.172	.180	.205	.228	.260
	.378	.065	.070	.070	.108	.140	.186
	.388	-.045	-.042	-.040	.028	.075	.131
Upper stage	.393	-.180	-.179	-.151	-.057	.006	.072
	.399	-.823	-1.204	-1.433	-1.115	-.969	-.825
	.404	-.224	-.315	-.412	-1.013	-.916	-.795
	.409	-.112	-.146	-.188	-.389	-.832	-.731
	.419	-.045	-.055	-.059	-.096	-.191	-.547
Transition	.429	.000	-.010	-.009	.018	.017	-.413
	.439	.022	.027	.024	.043	.088	-.002
	.449	.078	.081	.078	.090	.128	.138
	.459	.191	.200	.194	.208	.232	.243
	.482	.055	.062	.060	.060	.076	.133
Main stage	.492	.033	.035	.035	.036	.043	.092
	.512	.033	.013	.015	.007	.013	.048
	.532	.000	-.010	-.014	-.021	-.017	.013
	.552	-.045	-.056	-.064	-.079	-.078	.037
	.562	-.091	-.134	-.144	-.176	-.193	.137
Transition	.568	.158	.197	.218	.279	.421	.395
	.577	.068	.092	.101	.125	.131	.357
	.587	.045	.056	.064	.082	.084	.290
	.597	.034	.028	.034	.046	.044	.088
	.607	.023	.024	.028	.046	.044	.021
Main stage	.617	.023	.024	.030	.046	.037	.009
	.627	.011	.019	.026	.032	.034	.012
	.637	.000	-.010	.018	.028	.027	.012
	.657	.004	.002	.011	.021	.020	.012
	.677	.004	.012	.007	.009	.009	.009
Transition	.697	.004	.009	.007	.011	.012	.013
	.737	.004	.012	.001	.008	.008	.011
	.777	.011	.016	.005	.002	.002	.005
	.785	.011	.016	.005	.002	.001	.005
	.817	.009	.008	.003	.003	.003	.005
Main stage	.857	.006	.004	.003	.003	.007	.010
	.877	.003	.001	.003	.003	.008	.011
	.897	.003	.001	.003	.003	.009	.013
	.917	.003	.001	.003	.003	.010	.013
	.957	-.006	-.010	-.014	-.021	-.021	.024
Transition	.997	-.058	-.064	-.070	-.077	-.080	-.094

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

x/l		C_p for -						C_p for -					
		$\beta = -60^\circ$						$\beta = -50^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	Nose	.338	.229	.242	.245	.267	.319	.328	.261	.287	.293	.316	.362
		.348	.185	.203	.209	.232	.287	.338	.207	.225	.23	.255	.307
		.358	.152	.163	.168	.198	.254		.152	.163	.168	.194	.251
		.378	.044	.057	.067	.101	.180		.054	.057	.063	.101	.180
Transition		.388	.056	.051	.039	.021	.021						
		.393	.056	.069	.072	.075	.089		.203	.207	.185	.082	.047
		.399	.078	.127	.123	.065	.071		.755	.062	.007	.776	.655
		.404	.224	.319	.425	.020	.710						
Upper stage		.409	.101	.133	.184	.406	.824						
		.419	.045	.055	.059	.078	.718						
		.429	.000	.010	.014	.018	.566		.045	.051	.039	.158	.559
		.439	.034	.031	.028	.043	.004		.022	.027	.036	.088	.014
Flare		.449	.078	.077	.070	.083	.144						
		.459	.179	.186	.186	.197	.246		.191	.200	.211	.235	.256
		.482	.055	.058	.052	.057	.130		.055	.058	.052	.073	.130
		.492	.033	.035	.032	.036	.097						
Main stage		.512	.033	.013	.015	.007	.048		.022	.013	.011	.013	.048
		.532	.000	.010	.014	.021	.013						
		.552	.045	.065	.072	.090	.043		.045	.060	.068	.081	.041
		.562	.102	.134	.148	.176	.137						
Transition		.568	.158	.192	.214	.268	.369		.180	.247	.264	.522	.475
		.577	.068	.092	.101	.125	.360						
		.587	.045	.060	.068	.082	.296		.045	.060	.068	.084	.299
		.597	.034	.037	.043	.057	.117						
Main stage		.607	.023	.028	.034	.046	.021		.023	.028	.034	.044	.021
		.617	.023	.024	.030	.046	.012		.000	.019	.022	.034	.012
		.627	.000	.019	.022	.032	.012						
		.637	.000	.014	.018	.028	.012		.004	.002	.011	.018	.012
Upper stage		.657	.004	.001	.009	.014	.011						
		.677	.000	.005	.007	.010	.010		.000	.007	.005	.012	.013
		.697	.004	.010	.004	.009	.010		.004	.012	.001	.008	.011
		.737	.008	.017	.001	.007	.011		.008	.013	.002	.004	.006
Main stage		.777	.008	.015	.002	.003	.004		.008	.015	.002	.002	.005
		.785	.008	.016	.005	.004	.010		.010	.010	.005	.001	.002
		.817	.009	.009	.004	.002	.004		.006	.005	.000	.006	.010
		.857	.006	.005	.000	.007	.011						
Transition		.877	.004	.004	.001	.008	.011		.003	.002	.003	.009	.012
		.897	.004	.002	.003	.008	.016						
		.917	.001	.003	.006	.013	.023						
		.957	.009	.010	.014	.020	.023						
Main stage		.997	.059	.066	.070	.079	.095						

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$									
x/z	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/z	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Main stage	.328	.367	.305	.27	.205	.177	.119	Main stage	.338	.317	.272	.224	.178	.138	.089				
	.338	.334	.278	.23	.178	.144	.085		.348	.284	.239	.191	.139	.105	.030				
	.348	.301	.250	.197	.150	.110	.052		.358	.294	.206	.156	.106	.066	.003				
	.358	.262	.212	.158	.106	.066	.019		.368	.189	.140	.095	.047	.006	.040	.100			
	.378	.162	.106	.053	.006	.029	.083		.378	.079	.030	.016	.060	.102	.143	.198			
	.388	.041	.004	.054	.108	.138	.181		.388	.056	.030	.159	.239	.281	.330	.394			
	.393	.021	.095	.203	.275	.275	.312		.393	.079	.113	.159	.203	.239	.281	.330			
	.399	.481	.1001	.039	.104	1.077	1.086		.399	.095	.144	.191	.239	.281	.330	.394			
	.404	.181	.249	.276	.278	.291	.294		.404	.209	.237	.261	.282	.272	.274	.294			
	.409	.010	.124	.151	.147	.154	.151		.409	.095	.112	.124	.145	.130	.143	.151			
Upper stage	.419	.032	.044	.059	.056	.057	.054	Upper stage	.409	.095	.095	.095	.095	.095	.095				
	.429	.024	.004	.020	.010	.012	.015		.419	.033	.044	.050	.056	.063	.071				
	.439	.042	.030	.015	.024	.023	.020		.429	.002	.004	.010	.020	.010	.012				
	.449	.059	.076	.055	.070	.063	.054		.449	.087	.082	.076	.066	.075	.083				
	.459	.258	.230	.207	.166	.148	.134		.459	.246	.224	.207	.180	.178	.159				
	.469	.092	.069	.043	.024	.017	.014		.469	.087	.082	.076	.066	.075	.083				
	.479	.070	.041	.020	.007	.000	.009		.479	.082	.092	.089	.080	.069	.058				
	.482	.033	.030	.014	.001	.012	.032		.482	.097	.064	.041	.020	.009	.000				
	.492	.080	.041	.030	.014	.001	.012		.492	.069	.047	.024	.003	.010	.017	.038			
	.502	.058	.032	.020	.033	.040	.055		.502	.035	.013	.001	.020	.039	.046	.086			
Transition	.512	.025	.001	.020	.033	.040	.055	Transition	.512	.069	.047	.024	.039	.046	.086				
	.522	.013	.045	.066	.079	.081	.084		.522	.010	.021	.045	.066	.079	.086	.107			
	.532	.062	.096	.112	.114	.115	.118		.532	.096	.113	.125	.140	.153	.153	.175			
	.542	.164	.193	.208	.210	.183	.180		.542	.147	.164	.187	.191	.193	.183	.175			
	.552	.061	.079	.088	.102	.092	.089		.552	.061	.078	.079	.088	.102	.092	.095			
	.562	.021	.033	.048	.056	.046	.037		.562	.038	.049	.056	.060	.073	.069	.086			
	.572	.044	.061	.079	.088	.073	.063		.572	.027	.027	.033	.042	.045	.046	.083			
	.582	.021	.032	.050	.060	.073	.063		.582	.021	.021	.027	.037	.045	.049	.083			
	.592	.010	.021	.033	.048	.056	.046		.592	.010	.015	.021	.031	.039	.029	.037			
	.602	.001	.015	.027	.037	.045	.034		.02	.602	.010	.015	.021	.031	.039	.029	.037		
Flare	.612	.009	.021	.031	.039	.029	.026	Flare	.607	.021	.027	.033	.042	.045	.083				
	.622	.007	.016	.025	.033	.023	.020		.617	.010	.015	.021	.031	.039	.029	.037			
	.632	.017	.004	.020	.027	.012	.005		.627	.010	.015	.021	.031	.039	.029	.037			
	.642	.021	.006	.008	.014	.008	.005		.637	.010	.015	.021	.031	.039	.029	.037			
	.652	.025	.006	.006	.014	.008	.005		.647	.002	.004	.004	.008	.014	.013	.028			
	.662	.025	.006	.006	.014	.008	.005		.657	.002	.004	.004	.008	.014	.013	.028			
	.672	.025	.006	.006	.014	.008	.005		.667	.002	.004	.004	.008	.014	.013	.028			
	.682	.025	.006	.006	.014	.008	.005		.677	.002	.004	.004	.008	.014	.013	.028			
	.692	.025	.006	.006	.014	.008	.005		.687	.002	.004	.004	.008	.014	.013	.028			
	.702	.025	.006	.006	.014	.008	.005		.697	.002	.004	.004	.008	.014	.013	.028			
Rose	.712	.027	.010	.004	.002	.002	.003	Rose	.697	.002	.004	.004	.008	.014	.013	.028			
	.722	.027	.010	.004	.002	.002	.003		.707	.002	.004	.004	.008	.014	.013	.028			
	.732	.027	.010	.004	.002	.002	.003		.717	.002	.004	.004	.008	.014	.013	.028			
	.742	.027	.010	.004	.002	.002	.003		.727	.002	.004	.004	.008	.014	.013	.028			
	.752	.027	.010	.004	.002	.002	.003		.737	.002	.004	.004	.008	.014	.013	.028			
	.762	.027	.010	.004	.002	.002	.003		.747	.002	.004	.004	.008	.014	.013	.028			
	.772	.027	.010	.004	.002	.002	.003		.757	.002	.004	.004	.008	.014	.013	.028			
	.782	.027	.010	.004	.002	.002	.003		.767	.002	.004	.004	.008	.014	.013	.028			
	.792	.027	.010	.004	.002	.002	.003		.777	.002	.004	.004	.008	.014	.013	.028			
	.802	.027	.010	.004	.002	.002	.003		.787	.002	.004	.004	.008	.014	.013	.028			

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$						C_p for - $\beta = -90^\circ$							
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Rose	x/l														
		.338	.250	.219	.189	.149	.069		.328	.240	.267	.268	.261	.238	.168
		.348	.223	.180	.150	.110	.036		.358	.068	.145	.141	.134	.116	.047
		.358	.184	.141	.112	.072	-.003		.378	-.021	.046	.042	.029	.011	-.049
Main stage	x/l														
		.388	.084	.090	.068	.042	-.100								
		.393	-.021	-.044	-.071	-.102	-.198								
		.393	-.124	-.095	-.085	-.103	-.135								
Upper stage	x/l														
		.399	.817	.834	.881	.947	-1.045								
		.404	.283	.271	.266	.272	-.345								
		.404	-.158	-.129	-.124	-.124	-.185								
Transition	x/l														
		.419	-.101	-.072	-.065	-.056	-.143								
		.429	-.061	-.032	-.020	-.016	-.034								
		.439	-.027	.008	.015	.024	.006								
Flare	x/l														
		.449	.019	.053	.064	.055	.046								
		.459	.150	.179	.184	.169	.094								
		.482	.013	.041	.024	.006	-.038								
Main stage	x/l														
		.492	-.004	.025	.030	.020	-.055								
		.512	.016	.019	.024	.023	-.072								
		.532	-.039	-.015	-.010	-.020	-.095								
Transition	x/l														
		.552	-.096	-.067	-.068	-.071	-.141								
		.562	-.159	-.136	-.131	-.140	-.193								
		.568	-.233	-.192	-.187	-.185	-.237								
Main stage	x/l														
		.577	-.136	-.095	-.084	-.089	-.114								
		.587	-.107	-.072	-.061	-.065	-.112								
		.597	-.090	-.055	-.042	-.056	-.089								
Main stage	x/l														
		.607	-.084	-.049	-.033	-.045	-.077								
		.617	-.078	-.044	-.031	-.039	-.072								
		.627	-.073	-.032	-.025	-.033	-.056								
Main stage	x/l														
		.637	-.067	-.027	-.020	-.027	-.040								
		.657	-.054	-.021	-.012	-.006	-.053								
		.677	-.047	-.017	-.008	-.005	-.049								
Main stage	x/l														
		.697	-.040	-.013	-.004	-.016	-.045								
		.737	-.032	-.019	-.006	-.014	-.034								
		.777	-.024	-.013	-.001	-.013	-.030								
Main stage	x/l														
		.817	-.017	-.009	-.002	-.004	-.027								
		.857	-.003	-.003	-.003	-.004	-.029								
		.897	-.003	-.003	-.003	-.004	-.029								
Main stage	x/l														
		.917	-.003	-.003	-.003	-.004	-.029								
		.957	-.003	-.003	-.003	-.004	-.029								
		.997	-.003	-.003	-.003	-.004	-.029								

TABLE 2. - FACTOR COEFFICIENTS FOR CONCENTRATIONS 22. - Continues

10, $M = 0.001$, $\alpha = -25^\circ$ to 25°

z	$\frac{C_p}{C_s}$ for $\beta = 0^\circ$						$\frac{C_p}{C_s}$ for $\beta = -90^\circ$					
	$\alpha = -25^\circ$	$\alpha = -15^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 15^\circ$	$\alpha = -25^\circ$	$\alpha = -15^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 15^\circ$
Main range	480	394	349	273	252	215	410	345	304	259	215	165
	467	384	316	272	219	172	365	312	271	222	182	134
	39	417	282	237	215	135	348	278	234	192	146	91
	336	273	265	194	144	79	231	174	130	88	48	29
Flare	372	269	193	141	105	51	131	74	33	-102	-143	-183
	358	161	149	102	74	38	116	54	23	-105	-143	-183
	333	142	122	105	74	38	116	54	23	-105	-143	-183
	37	-1154	-1155	-1122	-1145	-1154	-1270	-1242	-1247	-1240	-1232	-1225
Transition	454	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134
Main range	480	394	349	273	252	215	410	345	304	259	215	165
	467	384	316	272	219	172	365	312	271	222	182	134
	39	417	282	237	215	135	348	278	234	192	146	91
	336	273	265	194	144	79	231	174	130	88	48	29
Flare	372	269	193	141	105	51	131	74	33	-102	-143	-183
	358	161	149	102	74	38	116	54	23	-105	-143	-183
	333	142	122	105	74	38	116	54	23	-105	-143	-183
	37	-1154	-1155	-1122	-1145	-1154	-1270	-1242	-1247	-1240	-1232	-1225
Transition	454	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134
	439	467	467	418	352	273	404	347	290	241	191	134

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(c) $M = 0.20$, $\alpha = -10^\circ$ to 10° - Continued

x, z	C_p for $\beta = -50^\circ$						
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
None	.328	.213	.271	.293	.357	.297	.212
	.358	.105	.152	.171	.181	.170	.093
	.375	.016	.063	.078	.084	.074	.008
	.353	-.211	-.162	-.143	-.136	-.143	-.216
	.399	-1.059	-1.055	-1.044	-1.037	-1.056	-1.109
	.419	-.145	-.088	-.062	-.044	-.054	-.157
	.439	-.072	-.012	.019	.029	.019	-.077
	.459	.124	.172	.187	.198	.195	.107
	.482	-.034	.019	.045	.052	.049	-.035
	.512	-.080	-.031	-.004	.006	.003	-.081
	.552	-.146	-.108	-.085	-.079	-.082	-.167
	.568	-.418	-.346	-.300	-.286	-.308	-.419
	.587	-.157	-.112	-.085	-.074	-.085	-.162
	.607	-.122	-.073	-.046	-.036	-.047	-.127
	.627	-.107	-.062	-.035	-.024	-.035	-.108
	.657	-.095	-.048	-.020	-.012	-.022	-.098
	.697	-.088	-.044	-.018	-.007	-.016	-.090
	.737	-.081	-.040	-.013	-.001	-.012	-.081
	.777	-.077	-.035	-.009	.000	-.008	-.075
	.785	-.081	-.037	-.007	.004	.006	-.075
	.817	-.070	-.025	-.004	.001	-.001	-.068
	.857	-.072	-.033	-.011	-.001	-.006	-.073
	.897	-.075	-.037	-.013	-.004	-.009	-.074
Main stage							
Transition							
Upper stage							
None							

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for -						
		$\beta = 0^\circ$						
x/l		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
Main stage		.583	.498	.406	.355	.321	.264	
		.553	.474	.377	.328	.289	.234	
		.524	.451	.347	.301	.256	.205	
		.488	.412	.315	.266	.221	.169	
Transition		.412	.341	.247	.201	.159	.104	
		.341	.276	.190	.154	.117	.063	
		.270	.214	.140	.103	.067	.021	
		.234	.178	.103	.056	.021	.038	
Upper stage		.562	.482	.389	.338	.299	.240	
		.534	.454	.361	.310	.271	.212	
		.507	.427	.334	.283	.244	.185	
		.479	.399	.306	.255	.216	.157	
Nozzle		.419	.339	.246	.195	.156	.107	
		.388	.308	.215	.164	.125	.076	
		.357	.277	.184	.133	.094	.045	
		.326	.246	.153	.102	.063	.014	
Main stage		.583	.498	.406	.355	.321	.264	
		.553	.474	.377	.328	.289	.234	
		.524	.451	.347	.301	.256	.205	
		.488	.412	.315	.266	.221	.169	
Transition		.412	.341	.247	.201	.159	.104	
		.341	.276	.190	.154	.117	.063	
		.270	.214	.140	.103	.067	.021	
		.234	.178	.103	.056	.021	.038	
Upper stage		.562	.482	.389	.338	.299	.240	
		.534	.454	.361	.310	.271	.212	
		.507	.427	.334	.283	.244	.185	
		.479	.399	.306	.255	.216	.157	
Nozzle		.419	.339	.246	.195	.156	.107	
		.388	.308	.215	.164	.125	.076	
		.357	.277	.184	.133	.094	.045	
		.326	.246	.153	.102	.063	.014	

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(2) $M = 1.00$, $\alpha = -10^\circ$ to 10° - Calculated

		C_p for - $\beta = -1^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/l							
		.328	.329	.383	.405	.406	.402	.384
		.358	.231	.279	.296	.303	.292	.268
		.378	.169	.223	.228	.232	.227	.212
Upper stage	x/l							
		.393	.036	.090	.104	.114	.109	.082
		.399	-.605	-.580	-.578	-.559	-.569	-.638
		.419	-.464	-.458	-.466	-.476	-.481	-.495
Flare	x/l							
		.439	-.364	-.306	-.286	-.276	-.283	-.317
		.459	.092	.142	.162	.175	.161	.133
		.482	-.011	.059	.081	.095	.084	.063
Flare	x/l							
		.512	-.042	.020	.042	.053	.045	.024
		.552	-.082	-.020	-.003	.004	.000	-.028
		.568	-.432	-.369	-.379	-.377	-.388	-.413
Main stage	x/l							
		.587	-.326	-.276	-.259	-.249	-.259	-.281
		.607	-.268	-.203	-.177	-.166	-.174	-.199
		.627	-.228	-.160	-.131	-.121	-.128	-.153
Main stage	x/l							
		.657	-.157	-.102	-.084	-.070	-.080	-.095
		.697	-.110	-.054	-.007	.014	-.042	-.064
		.737	-.056	-.003	.014	.025	.021	-.006
Main stage	x/l							
		.777	-.047	.001	.015	.025	.022	-.005
		.785	-.057	.003	.014	.027	.025	-.004
		.817	-.041	.003	.018	.024	.021	-.000
Main stage	x/l							
		.857	-.055	-.014	.003	.011	.007	-.017
		.897	-.062	-.022	-.007	.004	.001	-.024
								-.061

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Continued

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

		C_p for - $\beta = 0^\circ$							C_p for - $\beta = -30^\circ$						
		$\alpha = 0^\circ$							$\alpha = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	z/l	.328	.359	.369	.372	.375	.377	.378	.338	.487	.415	.356	.316	.272	.183
	Nose	.516	.430	.441	.430	.426	.424	.421	.348	.484	.415	.364	.323	.267	.188
	Upper stage	.521	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188
	Flare	.526	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188
Transition	z/l	.328	.359	.369	.372	.375	.377	.378	.338	.487	.415	.356	.316	.272	.183
	Nose	.516	.430	.441	.430	.426	.424	.421	.348	.484	.415	.364	.323	.267	.188
	Upper stage	.521	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188
	Flare	.526	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188
Main stage	z/l	.328	.359	.369	.372	.375	.377	.378	.338	.487	.415	.356	.316	.272	.183
	Nose	.516	.430	.441	.430	.426	.424	.421	.348	.484	.415	.364	.323	.267	.188
	Upper stage	.521	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188
	Flare	.526	.430	.441	.430	.426	.424	.421	.358	.487	.415	.364	.323	.267	.188

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 121 - Concluded

(c) $M = 1.20$, $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -5^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/l	.328	.256	.299	.311	.316	.317	.259
		.358	.258	.294	.303	.313	.301	.254
Transition	x/l	.378	.253	.304	.311	.310	.304	.243
		.393	.198	.249	.285	.279	.285	.196
Upper stage	x/l	.399	.329	.295	.296	.264	.306	.363
		.419	.281	.253	.251	.257	.261	.304
Lower stage	x/l	.439	.221	.166	.153	.146	.153	.226
		.459	.006	.091	.115	.133	.115	.001
Nose	x/l	.482	.016	.058	.089	.097	.064	.009
		.512	.038	.034	.065	.060	.039	.023
Main stage	x/l	.552	.032	.018	.041	.048	.007	.039
		.568	.211	.191	.178	.179	.183	.248
Transition	x/l	.587	.181	.150	.127	.114	.126	.213
		.607	.176	.118	.094	.079	.094	.191
Upper stage	x/l	.627	.162	.085	.070	.062	.069	.159
		.657	.124	.053	.026	.021	.028	.118
Lower stage	x/l	.697	.125	.068	.037	.029	.041	.124
		.737	.106	.056	.030	.028	.029	.110
Nose	x/l	.777	.073	.043	.021	.015	.020	.095
		.785	.083	.047	.023	.011	.019	.037
Main stage	x/l	.817	.071	.024	.016	.008	.015	.083
		.857	.075	.027	.014	.009	.028	.046
Transition	x/l	.897	.083	.037	.015	.004	.023	.072

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

x/l		C_p for -					
		$\phi = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage		.357	.448	.455	.497	.525	.562
		.367	.359	.366	.406	.433	.478
		.377	.292	.250	.303	.340	.388
		.387	.051	.134	.200	.246	.298
		.399	-1.140	-1.203	-1.185	-1.024	-.885
Transition		.404	-.698	-.736	-.907	-1.127	-.991
		.409	-.331	-.512	-.603	-.969	-.898
		.419	-.383	-.512	-.603	-.969	-.898
		.429	-.072	-.137	-.317	-.367	-.691
		.439	-.008	-.016	-.077	-.182	-.525
Upper stage		.449	-.004	.025	.030	.044	-.170
		.459	.029	.063	.080	.137	.081
		.482	.142	.175	.165	.208	.202
		.492	.018	.056	.058	.083	.151
		.512	.007	.038	.033	.050	.110
Nose		.532	.015	.009	.012	.017	.062
		.552	-.015	-.016	-.024	-.014	.077
		.562	-.073	-.054	-.086	-.078	-.034
		.568	-.124	-.143	-.169	-.184	-.134
		.577	-.206	-.222	-.276	-.373	-.404
Main stage		.587	-.084	-.091	.125	.132	.359
		.597	-.061	-.058	.082	-.078	.272
		.607	-.050	-.067	.060	-.058	.085
		.617	-.038	-.026	.049	-.044	.024
		.627	-.027	-.022	.037	-.037	.014
Transition		.637	-.015	-.012	.027	-.024	.014
		.657	-.015	-.000	.019	-.016	.013
		.677	-.015	.000	.018	-.015	.016
		.697	-.015	.003	.014	-.012	.015
		.737	-.012	.006	.007	-.010	.015
Main stage		.777	-.008	.002	.009	-.007	.012
		.785	-.008	.012	.007	.001	.009
		.817	-.007	.011	.005	-.003	.008
		.857	-.008	.007	.009	-.007	.012
		.877	-.011	.005	.012	-.006	.011
Upper stage		.897	.005	-.005	-.012	-.009	-.014
Nose							

x/l		C_p for -					
		$\phi = -30^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage		.367	.354	.362	.403	.433	.472
		.377	.261	.264	.312	.351	.394
		.387	.113	.126	.193	.240	.295
		.399	-1.066	-1.216	-1.232	-1.068	-.927
		.404	-.331	-.736	-.979	-1.140	-1.003
Transition		.409	-.173	-.499	-.589	-1.026	-.911
		.419	-.083	-.072	-.306	-1.330	-.675
		.429	-.038	-.012	-.059	-.125	-.521
		.439	-.004	.024	.033	.050	-.164
		.449	.041	.074	.083	.134	.078
Upper stage		.459	.153	.179	.172	.228	.202
		.482	.018	.056	.058	.083	.151
		.492	.007	.038	.033	.050	.110
		.512	.007	.015	.001	.017	.059
		.532	-.027	-.008	-.027	-.017	-.021
Nose		.552	-.073	-.059	-.067	-.086	-.034
		.562	-.141	-.128	-.143	-.176	-.082
		.568	-.163	-.192	-.210	-.195	-.140
		.577	-.084	-.091	-.100	-.129	-.394
		.587	-.061	-.063	-.067	-.085	-.359
Main stage		.597	-.050	-.035	-.046	-.081	-.281
		.607	-.038	-.026	-.042	-.044	-.062
		.617	-.027	-.022	-.029	-.044	-.024
		.627	-.027	-.017	-.025	-.037	-.014
		.637	-.015	-.012	-.021	-.024	-.017
Transition		.657	-.019	-.003	-.015	-.019	-.014
		.677	-.012	.006	-.005	-.009	-.011
		.697	-.015	.003	-.008	-.012	-.015
		.737	-.012	.006	-.005	-.009	-.011
		.777	-.008	.011	-.000	-.009	-.014
Main stage		.785	-.008	.011	-.000	-.003	-.008
		.817	-.007	.011	-.001	-.001	-.009
		.857	-.009	.006	-.003	-.003	-.008
		.877	-.011	.004	-.003	-.009	-.013
		.897	-.012	.006	-.012	-.010	-.013
Upper stage		.917	-.012	.003	-.006	-.011	-.015
		.957	-.023	-.007	-.017	-.022	-.026
		.997	-.072	-.061	-.073	-.082	-.095

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(a) $M = 0.10$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

		C_p for -						x/l	C_p for -						x/l	
		$\theta = -60^\circ$							$\theta = -90^\circ$							
		$M = 0.10$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$		$M = 0.10$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$		
Nose		.367	.281	.350	.358	.399	.430	.357	.369	.435	.447	.487	.515	.553	Main stage	
		.377	.182	.752	.264	.308	.345	.377	.182	.261	.268	.315	.358	.400		
		.387	.051	.118	.130	.197	.246	.387	.040	.140	.155	.218	.266	.319		
		.399	-1.336	-1.330	-1.342	-1.123	-.969	.399	-1.575	-1.506	-1.514	-1.228	-1.054	-.914		
Upper stage		.404	.331	.657	.732	.911	.1117	.404	.040	.056	.050	.055	.083	.148	Transition	
		.409	.173	.373	.503	.632	.901	.409	.018	.175	.166	.158	.198	.202		
		.419	-.094	-.062	-.503	-.632	-.901	.419	-.083	.024	.021	.041	.017	.164		
		.429	-.038	-.008	-.100	-.296	-.684	.429	-.015	.015	.004	.001	.017	.059		
Flare		.439	.004	.029	.008	.045	.138	.439	-.004	.024	.021	.041	.017	.164	Main stage	
		.449	.029	.070	.025	.044	.050	.449	.015	.015	.004	.001	.017	.059		
		.459	.142	.170	.063	.080	.134	.459	.142	.175	.166	.158	.198	.202		
		.482	.018	.056	.158	.158	.224	.482	.018	.056	.050	.055	.083	.148		
Nose		.492	.007	.038	.029	.055	.083	.492	.015	.015	.004	.001	.017	.059	Transition	
		.512	-.038	.015	.016	.027	.017	.512	-.015	.015	.004	.001	.017	.059		
		.532	-.084	.063	.076	.093	.089	.532	-.084	.063	.063	.089	.085	.040		
		.562	-.141	.128	.143	.176	.191	.562	-.197	.234	.252	.365	.411	.478		
Upper stage		.568	.163	.192	.205	.248	.343	.568	-.061	-.063	.071	.089	.085	.288	Main stage	
		.577	.084	.091	.100	.121	.129	.577	-.038	.026	.042	.049	.044	.024		
		.587	.061	.063	.067	.085	.085	.587	-.015	.017	.025	.035	.031	.017		
		.597	.050	.040	.046	.060	.058	.597	-.019	.003	.015	.021	.018	.016		
Flare		.607	.038	.026	.042	.049	.044	.607	.000	.000	.012	.015	.014	.016	Transition	
		.617	.027	.022	.029	.042	.037	.617	.012	.012	.004	.008	.009	.013		
		.627	.015	.017	.025	.035	.031	.627	.015	.017	.002	.002	.006	.011		
		.637	.015	.012	.021	.031	.024	.637	.003	.003	.002	.008	.006	.013		
Nose		.657	.019	.002	.014	.017	.015	.657	.003	.003	.003	.003	.003	.003	Main stage	
		.677	.017	.002	.010	.017	.015	.677	.003	.003	.003	.003	.003	.003		
		.697	.015	.005	.010	.017	.015	.697	.003	.003	.003	.003	.003	.003		
		.737	.012	.006	.007	.012	.011	.737	.003	.003	.003	.003	.003	.003		
Upper stage		.777	.008	.011	.001	.007	.003	.777	.003	.003	.003	.003	.003	.003	Transition	
		.785	.008	.011	.001	.007	.003	.785	.003	.003	.003	.003	.003	.003		
		.817	.007	.011	.001	.007	.003	.817	.003	.003	.003	.003	.003	.003		
		.877	.011	.006	.003	.010	.007	.877	.003	.003	.003	.003	.003	.003		
Flare		.897	.011	.006	.003	.010	.007	.897	.003	.003	.003	.003	.003	.003	Main stage	
		.917	.014	.005	.004	.012	.009	.917	.003	.003	.003	.003	.003	.003		
		.957	.023	.000	.009	.016	.014	.957	.003	.003	.003	.003	.003	.003		
		.997	.074	.017	.023	.022	.025	.997	.003	.003	.003	.003	.003	.003		

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 0^\circ$						C_p for $\beta = -30^\circ$									
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
x/l	Main stage	.357	.635	.551	.485	.420	.357	.290	.206	.367	.501	.429	.379	.320	.262	.201	.128
		.367	.540	.457	.390	.325	.262	.201	.128	.377	.406	.328	.279	.225	.173	.111	.044
Nose	Main stage	.377	.417	.328	.265	.203	.139	.083	.018	.387	.250	.178	.122	.074	.017	-.035	-.099
		.387	.295	.200	.139	.080	.017	-.035	-.093	.399	-1.201	-1.310	-1.339	-1.326	-1.270	-1.206	-1.253
Upper stage	Main stage	.404	-1.351	-1.495	-1.553	-1.528	-1.431	-1.235	-.941	.404	-.258	-.320	-.365	-.426	-.480	-.537	-.583
		.409	-.098	-.149	-.171	-.195	-.234	-.288	-.377	.409	-.109	-.143	-.166	-.181	-.206	-.251	-.309
Transition	Main stage	.429	-.012	-.000	-.063	-.072	-.080	-.080	-.080	.429	-.035	-.057	-.069	-.072	-.080	-.080	-.092
		.439	.067	.034	.023	.013	.011	.011	.017	.439	.005	-.012	-.017	-.021	-.023	-.023	-.029
Flare	Main stage	.449	.107	.079	.062	.059	.051	.051	.051	.449	.039	.022	.017	.013	-.011	-.011	.005
		.459	.255	.216	.193	.167	.148	.111	.108	.459	.096	.074	.068	.065	.057	.051	.045
Transition	Main stage	.482	.135	.085	.062	.042	.023	.011	-.011	.482	.244	.216	.193	.178	.153	.142	.119
		.492	-.113	.062	.040	.025	.006	.000	-.012	.492	.107	.073	.062	.040	.028	.011	.005
Upper stage	Main stage	.512	.096	.039	.023	.019	.000	-.017	-.041	.512	.090	.062	.040	.025	.006	.000	-.018
		.532	.067	.022	.000	-.015	-.029	-.046	-.058	.532	.067	.034	.017	.008	-.012	-.029	-.041
Flare	Main stage	.552	-.022	-.023	-.046	-.062	-.075	-.081	-.087	.552	.050	.011	-.006	.021	-.035	-.052	-.064
		.562	-.065	-.105	-.122	-.137	-.139	-.139	-.140	.562	-.001	-.023	-.046	-.062	-.075	-.087	-.105
Main stage	Main stage	.568	-.104	-.162	-.184	-.194	-.184	-.167	-.150	.568	-.139	-.173	-.184	-.182	-.184	-.173	-.156
		.577	-.030	-.069	-.086	-.090	-.092	-.092	-.081	.577	-.058	-.081	-.086	-.090	-.092	-.092	-.093
Transition	Main stage	.587	-.001	-.041	-.052	-.056	-.063	-.058	-.052	.587	-.030	-.052	-.058	-.061	-.063	-.063	-.064
		.597	.005	-.029	-.040	-.044	-.046	-.040	-.035	.597	.011	-.035	-.040	-.038	-.040	-.040	-.035
Upper stage	Main stage	.607	.016	-.023	-.029	-.033	-.040	-.035	-.023	.607	.012	-.029	-.029	.027	.027	.029	.035
		.617	.016	-.012	-.023	-.027	-.029	-.029	-.018	.617	.001	-.023	-.029	.027	.029	.029	.029
Lower stage	Main stage	.627	.021	-.012	-.023	-.027	-.023	-.023	-.018	.627	.001	-.023	-.023	.023	.023	.023	.029
		.637	.027	-.001	-.012	-.021	-.023	-.012	-.006	.637	.005	-.012	-.012	.012	.023	.023	.023
Main stage	Main stage	.657	.036	.004	-.004	-.002	-.004	-.008	.000	.657	.009	-.006	-.010	.002	-.008	-.015	.022
		.677	.036	.006	.000	.000	-.006	-.006	.002	.677	.020	.004	.000	.002	.004	.008	.016
Transition	Main stage	.697	.040	.008	.000	.004	.000	-.002	.002	.697	.015	-.002	.000	.002	.002	.010	.020
		.737	.040	.009	.002	.002	-.004	-.002	.000	.737	.015	.002	.000	.004	.002	.006	.018
Upper stage	Main stage	.777	.042	.013	.006	.006	.000	.000	.005	.777	.024	.008	.008	.010	.060	.006	.018
		.785	.047	.019	.008	.008	.002	.004	.015	.785	.019	.004	.002	.008	.002	.006	.014
Lower stage	Main stage	.817	.045	.019	.009	.006	.003	.003	.009	.817	.017	.007	.006	.002	.002	.006	.014
		.857	.038	.012	.004	.000	.000	-.002	.001	.857	.011	.002	.000	.002	.002	.004	.017
Flare	Main stage	.877	.039	.003	.004	.000	.000	-.002	.002	.877	.010	.000	.000	.002	.003	.010	.020
		.897	-.034	.010	.001	-.004	-.004	-.005	-.003	.897	.009	-.002	.000	.001	.004	.013	.022
Transition	Main stage	.917	.008	.002	.002	.000	.000	.000	.000	.917	.008	-.002	.004	.001	.007	.016	.025
		.957	-.008	.000	.000	.000	.000	.000	.000	.957	-.008	-.014	.004	.001	.004	.016	.025
Upper stage	Main stage	.977	-.034	.010	.001	.000	-.004	-.005	-.003	.977	-.008	-.077	-.064	-.064	-.074	-.090	-.112

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -50^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
		Main stage							Main stage						
.367	.373	.367	.345	.320	.279	.234	.145	.357	.328	.390	.412	.469	.401	.362	.284
.377	.284	.273	.251	.225	.184	.134	.061	.377	.155	.195	.217	.225	.201	.178	.128
.387	.133	.111	.080	.045	.045	.022	-.075	.387	.022	.067	.078	.097	.067	.045	.005
.399	-.1397	-.1484	-.1541	-.1563	-.1633	-.1662	-.1559	.399	-.1645	-.1651	-.1553	-.1753	-.1599	-.1662	-.1709
.404	.320	.337	.354	.364	.417	.451	.480	.419	.143	.097	.080	.072	.080	.103	.155
.409	.172	.166	.169	.169	.188	.211	.252	.419	.143	.097	.080	.072	.080	.103	.155
.419	.104	.092	.080	.078	.080	.097	.137	.419	.143	.097	.080	.072	.080	.103	.155
.429	.058	.035	.029	.021	.029	.046	.080	.429	.069	.017	.006	.013	.006	.017	.075
.439	.018	.005	.011	.013	.011	.006	.040	.439	.069	.017	.006	.013	.006	.017	.075
.449	.022	.045	.057	.059	.051	.034	.006	.449	.069	.017	.006	.013	.006	.017	.075
.459	.153	.170	.170	.167	.153	.136	.091	.459	.096	.148	.165	.173	.165	.142	.085
.469	.028	.039	.042	.042	.042	.046	.041	.469	.096	.148	.165	.173	.165	.142	.085
.479	.011	.022	.023	.019	.006	.012	.053	.479	.036	.011	.034	.042	.023	.006	.041
.489	.001	.001	.008	.008	.012	.029	.070	.489	.036	.011	.034	.042	.023	.006	.041
.512	.030	.018	.021	.021	.035	.058	.093	.512	.076	.029	.006	.008	.006	.029	.076
.532	.082	.076	.070	.068	.081	.104	.145	.532	.134	.093	.070	.068	.081	.099	.145
.552	.146	.139	.139	.137	.145	.162	.192	.552	.134	.093	.070	.068	.081	.099	.145
.562	.220	.202	.184	.182	.184	.196	.231	.562	.317	.259	.230	.217	.242	.271	.323
.577	.116	.098	.086	.084	.092	.109	.127	.577	.127	.092	.069	.061	.069	.086	.139
.587	.093	.081	.063	.061	.069	.081	.104	.587	.127	.092	.069	.061	.069	.086	.139
.597	.081	.058	.046	.038	.046	.063	.081	.597	.104	.064	.040	.033	.040	.063	.110
.607	.070	.046	.035	.033	.040	.052	.075	.607	.104	.064	.040	.033	.040	.063	.110
.617	.064	.029	.029	.027	.035	.046	.064	.617	.093	.046	.029	.021	.029	.052	.098
.627	.058	.041	.029	.027	.029	.040	.058	.627	.093	.046	.029	.021	.029	.052	.098
.637	.053	.035	.023	.021	.023	.035	.052	.637	.082	.037	.017	.002	.013	.040	.083
.657	.051	.027	.015	.004	.013	.029	.047	.657	.082	.037	.017	.002	.013	.040	.083
.677	.041	.021	.010	.001	.010	.024	.040	.677	.076	.035	.014	.000	.013	.037	.079
.697	.032	.016	.004	.002	.006	.019	.033	.697	.076	.035	.014	.000	.013	.037	.079
.717	.041	.020	.006	.006	.006	.019	.023	.717	.068	.029	.008	.004	.006	.031	.07
.737	.037	.016	.002	.008	.002	.015	.023	.737	.066	.029	.006	.008	.006	.027	.070
.757	.031	.018	.004	.008	.002	.013	.023	.757	.070	.029	.006	.006	.006	.027	.070
.777	.038	.013	.000	.006	.000	.010	.019	.777	.061	.026	.001	.008	.001	.020	.059
.797	.042	.017	.004	.002	.004	.013	.022	.797	.067	.026	.006	.002	.005	.025	.065
.817	.042	.017	.004	.002	.004	.013	.022	.817	.067	.026	.006	.002	.005	.025	.065
.837	.042	.017	.004	.002	.004	.013	.022	.837	.067	.026	.006	.002	.005	.025	.065
.857	.042	.017	.004	.002	.004	.013	.022	.857	.067	.026	.006	.002	.005	.025	.065
.877	.042	.017	.004	.002	.004	.013	.022	.877	.067	.026	.006	.002	.005	.025	.065
.897	.045	.019	.006	.000	.006	.015	.023	.897	.065	.028	.009	.001	.009	.029	.068
.917	.053	.026	.012	.004	.010	.019	.027	.917	.065	.028	.009	.001	.009	.029	.068
.937	.057	.034	.018	.012	.019	.028	.037	.937	.065	.028	.009	.001	.009	.029	.068
.957	.057	.034	.018	.012	.019	.028	.037	.957	.065	.028	.009	.001	.009	.029	.068
.977	.123	.097	.078	.066	.077	.095	.116	.977	.065	.028	.009	.001	.009	.029	.068

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

C_p for - $\beta = 0^\circ$										C_p for - $\beta = -30^\circ$									
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Nose	.357	.688	.605	.546	.474	.411	.348	.264	Nose	.367	.553	.489	.435	.380	.318	.178			
	.367	.598	.511	.446	.384	.318	.262	.182		.377	.463	.399	.341	.290	.231	.114			
	.377	.482	.397	.333	.274	.213	.157	.084		.387	.321	.256	.210	.155	.108	-.009			
	.387	.366	.282	.221	.163	.108	.052	-.013		.399	-1.356	-1.373	-1.382	-1.352	-.905	-.778			
Upper stage	.399	-1.313	-1.338	-1.355	-1.337	-1.088	-.676	-.475	Upper stage	.404	-.681	-.824	-.779	-.735	-.715	-.589			
	.404	-.673	-.774	-.764	-.731	-.684	-.599	-.477		.409	-.562	-.440	-.534	-.588	-.599	-.550			
	.409	-.351	-.479	-.530	-.558	-.565	-.503	-.512		.419	-.051	-.056	-.112	-.117	-.304	-.362			
	.419	-.017	-.660	-.127	-.236	-.320	-.369	-.420		.429	-.013	-.003	.004	-.029	-.089	-.170			
Transition	.429	.014	.005	.004	-.040	-.105	-.158	-.209	Transition	.439	.022	.028	.034	.029	.007	-.048			
	.439	.048	.038	.029	.003	-.031	-.055	-.055		.449	.083	.085	.088	.075	.056	-.025			
	.449	.102	.085	.071	.053	.034	.025	-.075		.459	.251	.231	.206	.166	.121	.090			
	.459	.266	.227	.199	.155	.114	.080	.075		.482	.089	.085	.080	.055	.045	-.013			
Flare	.482	.136	.097	.080	.055	.041	.026	.025	Flare	.492	.086	.062	.049	.033	.018	-.043			
	.492	.109	.070	.053	.033	.018	-.007	-.002		.512	.060	.039	.027	.006	-.009	-.044			
	.512	.082	.051	.038	.010	-.005	-.020	-.041		.532	.037	.013	.004	-.021	-.036	-.076			
	.532	.062	.024	.007	-.017	-.036	-.047	-.064		.552	-.021	-.038	-.047	-.072	-.106	-.118			
Main stage	.552	.010	-.026	-.047	-.072	-.087	-.098	-.103	Main stage	.562	-.145	-.139	-.144	-.154	-.157	-.181			
	.562	.103	.123	.137	.150	.145	.145	.150		.562	-.218	-.235	-.233	-.226	-.210	-.202			
	.568	.191	.235	.244	.246	.218	.186	.176		.577	.098	.103	.105	.110	.109	-.105			
	.577	.071	.092	.101	.110	.109	.101	.102		.587	-.068	-.068	-.066	.075	.075	-.079			
Main stage	.587	-.036	-.053	-.062	-.071	-.075	-.066	-.067	Main stage	.597	.067	.067	.067	.067	.067	-.048			
	.597	-.021	-.037	-.047	-.052	-.055	-.051	-.048		.597	-.036	-.037	-.039	.044	.044	-.039			
	.607	-.009	-.026	-.031	-.044	-.044	-.039	-.036		.607	-.036	-.037	-.035	.044	.044	-.039			
	.617	-.006	-.022	-.027	-.037	-.036	-.031	-.033		.617	-.037	-.030	-.027	.037	.036	-.040			
Main stage	.627	.002	-.014	-.020	-.033	-.032	-.028	-.025	Main stage	.627	-.028	-.026	-.027	.033	.032	-.040			
	.627	.009	-.006	-.016	-.021	-.024	-.020	-.021		.627	-.021	-.018	-.016	.025	.024	-.036			
	.637	.018	.005	-.004	-.015	-.014	-.013	-.011		.637	-.010	-.008	-.011	.017	.018	-.029			
	.647	.018	.005	-.004	-.013	-.013	-.012	-.011		.647	-.001	-.004	-.000	.008	.009	-.025			
Main stage	.657	.021	.008	.000	-.012	-.010	-.008	-.009	Main stage	.657	-.005	-.001	-.004	.008	.009	-.029			
	.667	.021	.009	.000	-.008	-.005	-.004	-.009		.667	-.004	-.001	-.000	.007	.007	-.025			
	.677	.021	.009	.000	-.008	-.005	-.004	-.009		.677	-.003	-.001	-.000	.007	.007	-.025			
	.687	.021	.009	.000	-.004	-.005	-.004	-.009		.687	-.007	-.009	-.006	.008	.008	-.025			
Main stage	.697	.026	.014	.004	-.004	-.005	-.002	-.002	Main stage	.697	-.007	-.009	-.006	.008	.008	-.020			
	.707	.031	.020	.009	-.002	-.002	-.002	-.002		.707	-.001	-.007	-.005	.000	.000	-.020			
	.717	.034	.018	.004	-.001	-.002	-.004	-.004		.717	-.006	-.007	-.006	.001	.001	-.025			
	.727	.026	.010	.004	-.004	-.005	-.007	-.013		.727	-.002	-.000	-.001	.006	.006	-.028			
Main stage	.737	.028	.013	.006	-.003	-.005	-.007	-.013	Main stage	.737	-.003	-.002	-.002	.008	.009	-.030			
	.747	.023	.006	-.001	-.007	-.008	-.010	-.017		.747	-.003	-.002	-.003	.008	.011	-.033			
	.757	.023	.008	-.001	-.007	-.008	-.010	-.017		.757	-.004	-.002	-.003	.008	.011	-.033			
	.767	.023	.008	-.001	-.007	-.008	-.010	-.017		.767	-.004	-.002	-.003	.008	.011	-.033			
Main stage	.777	.023	.008	-.001	-.007	-.008	-.010	-.017	Main stage	.777	-.008	-.007	-.006	.008	.011	-.033			
	.787	.023	.008	-.001	-.007	-.008	-.010	-.017		.777	-.008	-.007	-.006	.008	.011	-.033			
	.797	.023	.008	-.001	-.007	-.008	-.010	-.017		.797	-.008	-.007	-.006	.008	.011	-.033			
	.807	.023	.008	-.001	-.007	-.008	-.010	-.017		.807	-.008	-.007	-.006	.008	.011	-.033			

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	$x/1$	.367	.426	.405	.377	.336	.288	.201
		.377	.339	.315	.283	.243	.205	.129
		.387	.215	.191	.163	.130	.112	.013
		.399	-1.259	-1.277	-1.263	-1.270	-1.273	-0.898
Transition	$x/1$	.404	.685	.749	.739	.684	.595	.704
		.409	.462	.572	.589	.581	.584	.616
		.419	.105	.131	.198	.285	.288	.324
		.429	-.078	-.004	.017	.059	.089	.144
Upper stage	$x/1$	.439	.036	.034	.033	.022	.004	.055
		.449	.014	.009	.006	.006	.004	.017
		.459	.155	.183	.155	.140	.129	.090
		.482	.018	.061	.052	.041	.015	.037
Flare	$x/1$	.492	-.001	.032	.038	.018	.008	.052
		.512	.017	.009	.015	.009	.026	.080
		.532	.044	.012	.021	.036	.055	.107
		.552	.110	.084	.070	.091	.117	.161
Nose	$x/1$	.562	.192	.152	.152	.154	.187	.228
		.566	.296	.233	.222	.222	.237	.269
		.577	.160	.123	.110	.109	.120	.149
		.587	.133	.105	.110	.109	.086	.118
Main stage	$x/1$	.597	.106	.078	.075	.082	.062	.098
		.607	.094	.054	.056	.059	.044	.083
		.617	.094	.039	.044	.044	.047	.071
		.627	.090	.035	.037	.040	.043	.060
Transition	$x/1$	.637	.083	.041	.027	.028	.039	.071
		.657	.072	.028	.016	.019	.032	.052
		.677	.048	.014	.012	.016	.028	.046
		.697	.048	.007	.008	.014	.025	.040
Upper stage	$x/1$	.737	.060	.017	.007	.010	.016	.037
		.757	.056	.011	.003	.005	.013	.027
		.785	.062	.003	.003	.005	.013	.028
		.817	.052	.002	.000	.004	.017	.030
Main stage	$x/1$	.857	.058	.004	.005	.008	.017	.030
		.877	.057	.002	.006	.009	.017	.030
		.897	.059	.006	.007	.010	.018	.032
		.917	.067	.010	.012	.015	.023	.035
Nose	$x/1$	.957	.085	.018	.019	.023	.033	.048
		.977	.140	.079	.078	.085	.102	.127

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for - $\phi = 0^\circ$						C_p for - $\phi = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
x/l	Main stage	.357	.730	.610	.547	.488	.412	.367	.686	.626	.580	.523	.328
		.367	.650	.529	.470	.407	.331	.377	.612	.551	.502	.455	.278
x/l	Transition	.377	.560	.445	.388	.328	.255	.387	.499	.447	.401	.354	.185
		.387	.471	.340	.306	.249	.179	.399	.475	.423	.376	.330	.152
x/l	Upper stage	.399	.742	.777	.786	.792	.803	.404	.760	.788	.793	.805	.852
		.409	.791	.869	.896	.918	.944	.409	.789	.819	.844	.869	.904
x/l	Nose	.419	.657	.778	.829	.869	.904	.419	.589	.685	.747	.796	.838
		.429	.635	.752	.805	.846	.870	.429	.568	.665	.727	.776	.818
x/l	Main stage	.439	.623	.537	.465	.406	.330	.439	.520	.435	.358	.289	.111
		.449	.591	.506	.434	.375	.300	.449	.511	.426	.350	.281	.103
x/l	Transition	.459	.577	.492	.420	.361	.286	.459	.513	.428	.352	.283	.105
		.469	.559	.474	.402	.343	.268	.469	.523	.438	.362	.293	.115
x/l	Nose	.479	.612	.527	.455	.396	.321	.479	.540	.455	.379	.310	.132
		.489	.592	.507	.435	.376	.301	.489	.543	.458	.382	.313	.135
x/l	Main stage	.499	.580	.495	.423	.364	.289	.499	.553	.468	.392	.323	.145
		.509	.570	.485	.413	.354	.279	.509	.563	.478	.402	.333	.158
x/l	Transition	.519	.601	.516	.444	.385	.310	.519	.573	.488	.412	.343	.170
		.529	.592	.507	.435	.376	.301	.529	.583	.498	.422	.353	.183
x/l	Nose	.539	.622	.537	.465	.406	.331	.539	.601	.516	.440	.371	.195
		.549	.612	.527	.455	.396	.321	.549	.616	.531	.455	.386	.210
x/l	Main stage	.559	.592	.507	.435	.376	.301	.559	.629	.544	.468	.400	.225
		.569	.580	.495	.423	.364	.289	.569	.639	.554	.478	.410	.240
x/l	Transition	.579	.601	.516	.444	.385	.310	.579	.643	.558	.482	.413	.255
		.589	.592	.507	.435	.376	.301	.589	.653	.568	.492	.423	.270
x/l	Nose	.599	.622	.537	.465	.406	.331	.599	.666	.581	.505	.436	.285
		.609	.612	.527	.455	.396	.321	.609	.676	.591	.515	.446	.300
x/l	Main stage	.619	.592	.507	.435	.376	.301	.619	.689	.604	.528	.460	.315
		.629	.580	.495	.423	.364	.289	.629	.699	.614	.538	.470	.325
x/l	Transition	.639	.601	.516	.444	.385	.310	.639	.703	.618	.542	.473	.335
		.649	.592	.507	.435	.376	.301	.649	.713	.628	.552	.483	.345
x/l	Nose	.659	.622	.537	.465	.406	.331	.659	.726	.641	.565	.496	.355
		.669	.612	.527	.455	.396	.321	.669	.736	.651	.575	.506	.365
x/l	Main stage	.679	.592	.507	.435	.376	.301	.679	.749	.664	.588	.520	.375
		.689	.580	.495	.423	.364	.289	.689	.759	.674	.598	.530	.385
x/l	Transition	.699	.601	.516	.444	.385	.310	.699	.769	.684	.608	.539	.395
		.709	.592	.507	.435	.376	.301	.709	.779	.694	.618	.550	.405
x/l	Nose	.719	.622	.537	.465	.406	.331	.719	.789	.704	.628	.560	.415
		.729	.612	.527	.455	.396	.321	.729	.799	.714	.638	.570	.425
x/l	Main stage	.739	.592	.507	.435	.376	.301	.739	.809	.724	.648	.580	.435
		.749	.580	.495	.423	.364	.289	.749	.819	.734	.658	.590	.445
x/l	Transition	.759	.601	.516	.444	.385	.310	.759	.829	.744	.668	.600	.455
		.769	.592	.507	.435	.376	.301	.769	.839	.754	.678	.610	.465
x/l	Nose	.779	.622	.537	.465	.406	.331	.779	.849	.764	.688	.620	.475
		.789	.612	.527	.455	.396	.321	.789	.859	.774	.698	.630	.485
x/l	Main stage	.799	.592	.507	.435	.376	.301	.799	.869	.784	.708	.640	.495
		.809	.580	.495	.423	.364	.289	.809	.879	.794	.718	.650	.505
x/l	Transition	.819	.601	.516	.444	.385	.310	.819	.889	.804	.728	.660	.515
		.829	.592	.507	.435	.376	.301	.829	.899	.814	.738	.670	.525
x/l	Nose	.839	.622	.537	.465	.406	.331	.839	.909	.824	.748	.680	.535
		.849	.612	.527	.455	.396	.321	.849	.919	.834	.758	.690	.545
x/l	Main stage	.859	.592	.507	.435	.376	.301	.859	.929	.844	.768	.700	.555
		.869	.580	.495	.423	.364	.289	.869	.939	.854	.778	.710	.565
x/l	Transition	.879	.601	.516	.444	.385	.310	.879	.949	.864	.788	.720	.575
		.889	.592	.507	.435	.376	.301	.889	.959	.874	.798	.730	.585
x/l	Nose	.899	.622	.537	.465	.406	.331	.899	.969	.884	.808	.740	.595
		.909	.612	.527	.455	.396	.321	.909	.979	.894	.818	.750	.605
x/l	Main stage	.919	.592	.507	.435	.376	.301	.919	.989	.904	.828	.760	.615
		.929	.580	.495	.423	.364	.289	.929	.999	.914	.838	.770	.625
x/l	Transition	.939	.601	.516	.444	.385	.310	.939	.999	.914	.838	.770	.625
		.949	.592	.507	.435	.376	.301	.949	.999	.914	.838	.770	.625
x/l	Nose	.959	.622	.537	.465	.406	.331	.959	.999	.914	.838	.770	.625
		.969	.612	.527	.455	.396	.321	.969	.999	.914	.838	.770	.625
x/l	Main stage	.979	.592	.507	.435	.376	.301	.979	.999	.914	.838	.770	.625
		.989	.580	.495	.423	.364	.289	.989	.999	.914	.838	.770	.625
x/l	Transition	.999	.601	.516	.444	.385	.310	.999	.999	.914	.838	.770	.625
		.999	.592	.507	.435	.376	.301	.999	.999	.914	.838	.770	.625

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Continued

(a) $M = 1.0$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -90^\circ$										
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
x/l	Main stage	.367	.570	.569	.550	.520	.482	.440	.355	x/l <th rowspan="2">Main stage</th> <td>.357</td> <td>.529</td> <td>.587</td> <td>.606</td> <td>.601</td> <td>.589</td> <td>.559</td> <td>.495</td>	Main stage	.357	.529	.587	.606	.601	.589	.559	.495
		.377	.502	.495	.475	.446	.411	.377	.293			.377	.383	.432	.449	.455	.431	.407	.349
x/l	Main stage	.387	.410	.403	.389	.357	.327	.300	.206	x/l <th rowspan="2">Main stage</th> <td>.387</td> <td>.294</td> <td>.355</td> <td>.359</td> <td>.381</td> <td>.345</td> <td>.321</td> <td>.272</td>	Main stage	.387	.294	.355	.359	.381	.345	.321	.272
		.399	.702	.702	.709	.722	.755	.768	.791			.399	.799	.797	.777	.796	.786	.795	.812
x/l	Main stage	.404	.806	.825	.845	.863	.881	.896	.919	x/l <th rowspan="2">Main stage</th> <td>.419</td> <td>.538</td> <td>.583</td> <td>.595</td> <td>.594</td> <td>.589</td> <td>.575</td> <td>.575</td>	Main stage	.419	.538	.583	.595	.594	.589	.575	.575
		.409	.641	.726	.744	.787	.820	.851	.883			.419	.538	.566	.583	.595	.594	.589	.575
x/l	Main stage	.419	.437	.505	.552	.586	.619	.640	.660	x/l <th rowspan="2">Main stage</th> <td>.439</td> <td>.407</td> <td>.356</td> <td>.342</td> <td>.336</td> <td>.348</td> <td>.372</td> <td>.416</td>	Main stage	.439	.407	.356	.342	.336	.348	.372	.416
		.429	.339	.377	.415	.446	.479	.506	.523			.439	.407	.356	.342	.336	.348	.372	.416
x/l	Main stage	.439	.300	.307	.321	.336	.360	.384	.423	x/l <th rowspan="2">Main stage</th> <td>.459</td> <td>.035</td> <td>.104</td> <td>.127</td> <td>.133</td> <td>.127</td> <td>.100</td> <td>.028</td>	Main stage	.459	.035	.104	.127	.133	.127	.100	.028
		.449	.272	.252	.226	.168	.125	.076	.023			.459	.035	.104	.127	.133	.127	.100	.028
x/l	Main stage	.459	.048	.116	.133	.130	.109	.076	.048	x/l <th rowspan="2">Main stage</th> <td>.482</td> <td>.035</td> <td>.049</td> <td>.072</td> <td>.087</td> <td>.076</td> <td>.048</td> <td>.042</td>	Main stage	.482	.035	.049	.072	.087	.076	.048	.042
		.482	.029	.077	.081	.087	.076	.048	.023			.482	.035	.049	.072	.087	.076	.048	.042
x/l	Main stage	.492	.017	.046	.060	.066	.054	.030	.012	x/l <th rowspan="2">Main stage</th> <td>.512</td> <td>.054</td> <td>.016</td> <td>.036</td> <td>.046</td> <td>.039</td> <td>.015</td> <td>.042</td>	Main stage	.512	.054	.016	.036	.046	.039	.015	.042
		.512	.017	.046	.060	.066	.054	.030	.012			.512	.054	.016	.036	.046	.039	.015	.042
x/l	Main stage	.532	.008	.037	.033	.036	.018	.003	.054	x/l <th rowspan="2">Main stage</th> <td>.552</td> <td>.088</td> <td>.021</td> <td>.007</td> <td>.003</td> <td>.006</td> <td>.031</td> <td>.092</td>	Main stage	.552	.088	.021	.007	.003	.006	.031	.092
		.532	.008	.037	.033	.036	.018	.003	.054			.552	.088	.021	.007	.003	.006	.031	.092
x/l	Main stage	.562	.037	.064	.072	.081	.102	.127	.175	x/l <th rowspan="2">Main stage</th> <td>.568</td> <td>.432</td> <td>.386</td> <td>.379</td> <td>.373</td> <td>.391</td> <td>.415</td> <td>.475</td>	Main stage	.568	.432	.386	.379	.373	.391	.415	.475
		.568	.327	.294	.290	.286	.298	.329	.377			.568	.432	.386	.379	.373	.391	.415	.475
x/l	Main stage	.577	.302	.285	.287	.283	.298	.335	.389	x/l <th rowspan="2">Main stage</th> <td>.587</td> <td>.327</td> <td>.276</td> <td>.256</td> <td>.249</td> <td>.258</td> <td>.292</td> <td>.346</td>	Main stage	.587	.327	.276	.256	.249	.258	.292	.346
		.587	.256	.242	.247	.249	.258	.283	.312			.587	.327	.276	.256	.249	.258	.292	.346
x/l	Main stage	.597	.238	.214	.210	.203	.209	.237	.260	x/l <th rowspan="2">Main stage</th> <td>.607</td> <td>.269</td> <td>.205</td> <td>.182</td> <td>.169</td> <td>.175</td> <td>.209</td> <td>.272</td>	Main stage	.607	.269	.205	.182	.169	.175	.209	.272
		.597	.238	.214	.210	.203	.209	.237	.260			.607	.269	.205	.182	.169	.175	.209	.272
x/l	Main stage	.617	.222	.187	.179	.173	.172	.194	.214	x/l <th rowspan="2">Main stage</th> <td>.627</td> <td>.235</td> <td>.162</td> <td>.136</td> <td>.120</td> <td>.126</td> <td>.163</td> <td>.229</td>	Main stage	.627	.235	.162	.136	.120	.126	.163	.229
		.617	.222	.187	.179	.173	.172	.194	.214			.627	.235	.162	.136	.120	.126	.163	.229
x/l	Main stage	.637	.186	.134	.117	.102	.102	.123	.146	x/l <th rowspan="2">Main stage</th> <td>.657</td> <td>.168</td> <td>.108</td> <td>.088</td> <td>.076</td> <td>.082</td> <td>.117</td> <td>.173</td>	Main stage	.657	.168	.108	.088	.076	.082	.117	.173
		.637	.186	.134	.117	.102	.102	.123	.146			.657	.168	.108	.088	.076	.082	.117	.173
x/l	Main stage	.677	.155	.105	.088	.075	.076	.099	.114	x/l <th rowspan="2">Main stage</th> <td>.697</td> <td>.117</td> <td>.081</td> <td>.066</td> <td>.057</td> <td>.040</td> <td>.094</td> <td>.127</td>	Main stage	.697	.117	.081	.066	.057	.040	.094	.127
		.677	.155	.105	.088	.075	.076	.099	.114			.697	.117	.081	.066	.057	.040	.094	.127
x/l	Main stage	.737	.086	.067	.060	.056	.026	.073	.061	x/l <th rowspan="2">Main stage</th> <td>.737</td> <td>.046</td> <td>.004</td> <td>.019</td> <td>.028</td> <td>.030</td> <td>.003</td> <td>.045</td>	Main stage	.737	.046	.004	.019	.028	.030	.003	.045
		.737	.086	.067	.060	.056	.026	.073	.061			.737	.046	.004	.019	.028	.030	.003	.045
x/l	Main stage	.777	.012	.022	.035	.042	.032	.021	.001	x/l <th rowspan="2">Main stage</th> <td>.777</td> <td>.039</td> <td>.010</td> <td>.029</td> <td>.040</td> <td>.029</td> <td>.006</td> <td>.038</td>	Main stage	.777	.039	.010	.029	.040	.029	.006	.038
		.777	.012	.022	.035	.042	.032	.021	.001			.777	.039	.010	.029	.040	.029	.006	.038
x/l	Main stage	.817	.023	.016	.031	.039	.034	.019	.003	x/l <th rowspan="2">Main stage</th> <td>.817</td> <td>.039</td> <td>.005</td> <td>.029</td> <td>.040</td> <td>.032</td> <td>.010</td> <td>.029</td>	Main stage	.817	.039	.005	.029	.040	.032	.010	.029
		.817	.023	.016	.031	.039	.034	.019	.003			.817	.039	.005	.029	.040	.032	.010	.029
x/l	Main stage	.857	.033	.003	.012	.016	.008	.000	.012	x/l <th rowspan="2">Main stage</th> <td>.857</td> <td>.036</td> <td>.007</td> <td>.027</td> <td>.033</td> <td>.023</td> <td>.007</td> <td>.032</td>	Main stage	.857	.036	.007	.027	.033	.023	.007	.032
		.857	.033	.003	.012	.016	.008	.000	.012			.857	.036	.007	.027	.033	.023	.007	.032
x/l	Main stage	.877	.034	.005	.007	.010	.004	.004	.017	x/l <th rowspan="2">Main stage</th> <td>.897</td> <td>.054</td> <td>.011</td> <td>.010</td> <td>.016</td> <td>.006</td> <td>.012</td> <td>.052</td>	Main stage	.897	.054	.011	.010	.016	.006	.012	.052
		.877	.034	.005	.007	.010	.004	.004	.017			.897	.054	.011	.010	.016	.006	.012	.052
x/l	Main stage	.917	.040	.010	.003	.006	.001	.010	.021	x/l <th rowspan="2">Main stage</th> <td>.917</td> <td>.021</td> <td>.021</td> <td>.001</td> <td>.006</td> <td>.001</td> <td>.024</td> <td>.061</td>	Main stage	.917	.021	.021	.001	.006	.001	.024	.061
		.917	.040	.010	.003	.006	.001	.010	.021			.917	.021	.021	.001	.006	.001	.024	.061
x/l	Main stage	.957	.050	.019	.006	.004	.004	.015	.024	x/l <th rowspan="2">Main stage</th> <td>.957</td> <td>.052</td> <td>.009</td> <td>.005</td> <td>.004</td> <td>.004</td> <td>.004</td> <td>.052</td>	Main stage	.957	.052	.009	.005	.004	.004	.004	.052
		.957	.050	.019	.006	.004	.004	.015	.024			.957	.052	.009	.005	.004	.004	.004	.052
x/l	Main stage	.997	.110	.091	.092	.104	.114	.141	.159	x/l <th rowspan="2">Main stage</th> <td>.997</td> <td>.065</td> <td>.021</td> <td>.001</td> <td>.006</td> <td>.001</td> <td>.024</td> <td>.061</td>	Main stage	.997	.065	.021	.001	.006	.001	.024	.061
		.997	.110	.091	.092	.104	.114	.141	.159			.997	.065	.021	.001	.006	.001	.024	.061

TABLE 1.- FREQUENCY COEFFICIENTS FOR VIBRATION 221 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 10^\circ$						C_p for $\beta = -10^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	
Main stage	Wave	.357	.367	.377	.387	.397		.367	.377	.387	.397	.407	
	Upper stage	.407	.417	.427	.437	.447		.417	.427	.437	.447	.457	
	Flare	.457	.467	.477	.487	.497		.467	.477	.487	.497	.507	
	Trunnion	.507	.517	.527	.537	.547		.517	.527	.537	.547	.557	
Main stage	Wave	.489	.499	.509	.519	.529		.499	.509	.519	.529	.539	
	Upper stage	.539	.549	.559	.569	.579		.549	.559	.569	.579	.589	
	Flare	.589	.599	.609	.619	.629		.599	.609	.619	.629	.639	
	Trunnion	.639	.649	.659	.669	.679		.649	.659	.669	.679	.689	

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 221 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for - $\beta = -5^\circ$										C_p for - $\beta = -5^\circ$									
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Main stage	.367	.668	.664	.617	.581	.543	.454	Main stage	.357	.607	.654	.670	.635	.638	.573				
	.377	.620	.617	.570	.544	.503	.417		.377	.504	.548	.567	.580	.535	.478				
	.387	.554	.553	.517	.494	.458	.359		.387	.443	.511	.509	.533	.482	.423				
	.394	.365	.359	.386	.399	.417	.442		.399	.464	.452	.435	.446	.434	.464				
	.404	.489	.499	.522	.530	.545	.568												
Upper stage	.409	.375	.418	.476	.495	.518	.546	Upper stage	.419	.323	.336	.349	.343	.339	.348				
	.419	.285	.316	.341	.356	.374	.402												
	.429	.176	.201	.230	.237	.298	.332		.439	.236	.201	.192	.194	.204	.248				
	.439	.147	.160	.192	.210	.231	.277			.024	.059	.095	.106	.093	.039				
	.449	.130	.125	.135	.150	.176	.248			.047	.040	.076	.087	.082	.051				
Transition	.459	.076	.095	.101	.085	.065	.007	Transition	.459	.024	.059	.065	.055	.038	.029				
	.482	.011	.085	.087	.085	.062	.005		.482	.047	.040	.076	.087	.051	.034				
	.492	.006	.057	.076	.072	.048	.001			.030		.060	.065						
	.512	.019	.057	.065	.050	.032	.015		.512	.044		.044	.044	.039	.008				
	.522	.024	.057	.060	.042	.027	.026			.038	.013	.044	.044						
Flare	.532	.016	.044	.038	.029	.000	.037	Flare	.552	.038									
	.562	.000	.017	.009	.007	.028	.054		.568	.222	.194	.177	.174	.182	.197				
	.568	.151	.137	.133	.146	.159	.201			.183	.153	.122	.111	.127	.214				
	.577	.151	.142	.130	.149	.170	.222		.587			.123	.076	.094	.190				
	.587	.126	.126	.111	.103	.141	.148			.607	.178								
Main stage	.597	.115	.107	.089	.108	.126	.165	Main stage	.627	.161	.088	.059	.070	.090	.160				
	.607	.115	.099	.076	.086	.107	.143			.120	.054	.029	.018	.059	.116				
	.617	.120	.096	.068	.075	.090	.121												
	.627	.120	.090	.068	.070	.085	.102												
	.637	.112	.066	.059	.048	.056	.066		.657										
Upper stage	.657	.089	.036	.018	.023	.046	.069	Upper stage	.657										
	.677	.082	.040	.021	.027	.043	.067												
	.697	.076	.045	.026	.031	.039	.064		.697	.124	.069	.038	.026	.040	.122				
	.737	.081	.044	.026	.023	.043	.052			.105	.058	.032	.025	.026	.109				
	.777	.061	.035	.023	.013	.019	.029		.045	.777	.083	.048	.024	.019	.044	.091			
Main stage	.785	.047	.037	.008	.016	.023	.043	Main stage	.795	.079	.048	.016	.017	.043	.093				
	.817	.054	.021	.013	.016	.028	.046			.087	.027	.009	.008	.035	.084				
	.857	.054	.013	.012	.019	.027	.045			.074	.027	.015	.027	.046	.083				
	.877	.052	.028	.006	.005	.018	.041			.079	.028								
	.897	.061	.027	.007	.002	.001	.014		.032	.897	.083	.036	.015	.005	.022	.072			
Flare	.917	.069	.030	.005	.008	.018	.028	Flare											
	.937	.068	.033	.013	.017	.018	.033												
	.957	.068	.040	.033	.017	.008	.102												
	.977	.062	.045	.053	.068	.088													

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

C_p for -							C_p for -							
$\beta = 0^\circ$							$\beta = -30^\circ$							
x/l	$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	x/l	$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	
Main stage	.371	.552	.575	.627	.658	.700	Main stage	.492	.548	.575	.623	.655	.696	
	.381	.396	.421	.480	.514	.562		.381	.358	.392	.456	.494	.544	
	.391	.173	.209	.291	.336	.391		.391	.085	.209	.288	.333	.391	
	.399	-1.072	-1.042	-.835	-.973	-.836		.399	-1.483	-.941	-.861	-1.198	-1.065	
	.404	-.864	-.844	-.686	-.999	-1.114		.404	-.409	-.813	-.672	-.999	-1.114	
Upper stage	.409	-.631	-.669	-.643	-.689	-.996	Upper stage	.409	-.644	-.656	-.626	-.676	-.999	
	.419	-.060	-.319	-.522	-.481	-.777		.419	-.060	-.352	-.504	-.484	-.763	
	.429	-.004	-.094	-.346	-.322	-.593		.429	-.004	-.102	-.335	-.326	-.793	
	.439	.030	.010	-.153	-.174	-.242		.439	.030	.072	-.045	-.053	-.242	
	.445	.075	.063	-.024	-.040	.030		.445	.075	.072	-.045	-.053	-.026	
Transition	.459	.176	.151	.080	.081	.151	Transition	.459	.154	.147	.099	.071	.151	
	.482	.053	.064	.090	.091	.153		.482	.053	.064	.090	.091	.153	
	.492	.053	.043	.069	.075	.118		.492	.053	.043	.069	.075	.118	
	.512	.041	.018	.040	.041	.071		.512	.030	.013	.018	.034	.068	
	.532	.019	-.010	-.002	.001	.026		.532	.008	-.014	-.011	-.010	-.006	
Flare	.552	-.038	-.057	-.068	-.071	-.038	Flare	.552	-.038	-.057	-.088	-.071	-.038	
	.562	-.095	-.126	-.140	-.160	-.138		.562	-.095	-.126	-.129	-.167	-.145	
	.568	-.129	-.203	-.237	-.284	-.402		.568	-.129	-.185	-.191	-.267	-.395	
	.577	-.049	-.093	-.107	-.121	-.347		.577	-.049	-.093	-.095	-.107	-.367	
	.587	-.015	-.060	-.061	-.071	-.077		-.202	.587	-.026	-.060	-.061	-.077	-.208
Main stage	.597	-.004	.047	.053	.053	.047	Main stage	.597	.037	.032	.038	.040	.031	
	.607	-.004	.033	.038	.043	.018		.607	.004	.033	.032	.036	.021	
	.617	.008	.028	.031	.036	.018		.617	.008	.028	.028	.036	.018	
	.627	.008	.023	.019	.030	.018		.627	.008	.023	.019	.030	.018	
	.637	.019	.014	.015	.019	.015		.637	.019	.019	.015	.020	.018	
	.657	.019	.007	.014	.016	.015		.657	.015	.008	.017	.018	.015	
	.677	.019	.007	.013	.015	.015		.677	.023	.002	.001	.010	.015	
	.697	.023	.002	.011	.011	.014		.697	.023	.002	.002	.011	.014	
	.737	.023	.000	.010	.010	.015		.737	.023	.006	.006	.008	.010	
	.777	.037	.004	.005	.006	.013		.777	.027	.007	.008	.002	.004	
	.785	.027	.007	.002	.002	.010		.785	.028	.005	.001	.003	.008	
	.817	.028	.005	.001	.002	.009		.817	.025	.003	.003	.006	.008	
	.857	.025	.004	.005	.006	.012		.857	.025	.000	.002	.007	.014	
	.877	.025	.002	.004	.006	.015		.877	.022	.003	.000	.009	.016	
	.897	.024	-.001	.001	.007	.008		.897	.022	.003	.000	.009	.016	

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

x/z		C_p for -						C_p for -						
		$\gamma = -60^\circ$						$\gamma = -90^\circ$						
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	
Nose	.371	.481	.548	.571	.616	.652	.690	.371	.481	.543	.567	.616	.649	.690
	.381	.316	.387	.413	.466	.504	.553	.391	.085	.173	.209	.284	.333	.388
Upper stage	.399	-1.119	-1.012	-.903	-.821	-.809	-1.085	.399	-.755	-.702	-.655	-.622	-.622	-.800
	.404	-.375	-.736	-.698	.643	.676	-1.002	.419	-.037	-.357	-.473	-.540	-.548	-.763
Transition	.429	-.184	-.640	-.656	.618	.656	-.779	.439	.030	.036	-.002	-.224	-.295	-.200
	.439	-.060	-.297	-.415	.515	.555	-.590	.459	.165	.141	.139	.051	-.016	.131
Main stage	.449	-.004	-.042	-.131	.353	.410	-.590	.482	.053	.054	.068	.090	.088	.153
	.459	.030	.036	.014	.185	.252	-.216	.512	.030	.013	.018	.026	.038	.064
	.492	.075	.068	.072	-.053	-.100	.007	.552	-.038	-.065	-.062	-.071	-.074	-.044
	.532	.165	.145	.143	.058	.098	.138	.568	-.151	-.217	-.221	-.248	-.261	-.473
	.552	.053	.054	.064	.090	.098	.153	.587	-.026	-.065	-.065	-.075	-.081	-.208
	.562	.030	.013	.018	.026	.038	.064	.607	-.004	-.033	-.032	-.038	-.043	-.021
	.577	.008	-.014	-.011	.013	-.006	.023	.627	.008	-.023	-.019	-.028	-.030	-.018
	.587	-.038	-.065	-.066	.075	-.074	-.047	.657	.015	-.010	-.008	-.017	-.017	-.016
	.597	-.095	-.126	-.129	.148	.160	-.145	.697	.019	-.002	-.002	-.012	-.013	-.016
	.607	-.129	-.185	-.187	.212	.244	-.366	.737	.023	.001	.002	-.007	-.008	-.013
	.617	-.049	-.093	-.091	.107	.115	-.347	.777	.027	.004	.003	-.004	-.005	-.011
	.627	-.026	-.065	-.061	.075	-.081	-.208	.817	.027	.004	.003	-.004	-.005	-.011
	.637	-.004	-.042	-.040	.049	.053	-.044	.857	.030	.007	.009	.001	.001	-.006
	.647	-.004	-.033	-.032	.038	-.043	-.021	.897	.025	.001	.004	-.005	-.006	-.013
	.657	.008	-.028	-.028	.035	.036	-.018							
	.667	.008	-.023	-.019	.028	.030	-.018							
	.677	.019	-.019	-.015	.020	-.023	-.016							
	.687	.019	-.004	-.005	.013	-.014	-.015							
	.697	.023	.000	-.002	.010	-.010	-.014							
	.737	.023	.003	.001	.008	-.008	-.014							
	.777	.027	.004	.005	.004	.005	-.010							
	.817	.028	.006	.006	.005	.005	-.011							
	.857	.028	.005	.008	.001	.001	-.008							
	.877	.025	.001	.003	.006	.007	-.013							
	.897	.024	.000	.002	.006	.007	-.014							
	.917	.024	-.001	.001	.008	-.008	-.015							
	.957	.021	-.005	-.003	.012	-.012	-.020							
	.977	.013	-.014	-.011	.020	-.021	-.027							
	.997	-.039	-.067	-.067	-.081	-.086	-.098							

TABLE 2.1. PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$											
x/l		$\alpha = 0^\circ$					$\alpha = 30^\circ$					$\alpha = 60^\circ$					$\alpha = 100^\circ$				
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$						
None	371	.735	.655	.584	.523	.445	.381	.279	.371	.702	.633	.573	.517	.451	.386	.285					
	381	.584	.493	.428	.366	.289	.230	.139	.381	.504	.432	.372	.319	.255	.205	.116					
	391	.344	.248	.177	.126	.060	.018	-.046	.391	.305	.231	.171	.121	.060	.024	-.052					
	399	-1.273	-1.344	-1.325	-1.204	-1.163	-.993	-.722	399	-1.429	-1.361	-1.331	-1.354	-1.093	-.877	-.809					
Main stage	404	-.430	-.649	-.785	-.819	-.830	-.753	-.629	404	-.379	-.655	-.750	-.739	-.836	-.765	-.720					
	409	-.110	-.192	-.287	-.408	-.510	-.570	-.623	409	-.127	-.226	-.339	-.379	-.488	-.593	-.612					
	419	-.019	-.055	-.070	-.082	-.144	-.204	-.314	419	-.053	-.066	-.076	-.088	-.139	-.199	-.274					
	429	.016	-.009	-.024	-.019	-.041	-.056	-.097	429	-.007	-.020	-.024	-.019	-.036	-.050	-.086					
Upper stage	439	.055	.025	.016	.015	.001	.001	.006	439	.027	.014	.010	.015	.001	.001	.011					
	449	.101	.077	.061	.061	.039	.036	.034	449	.095	.077	.067	.066	.044	.036	.028					
	459	.249	.207	.181	.157	.113	.093	.068	459	.232	.207	.181	.157	.118	.104	.091					
	482	.129	.082	.055	.049	.016	.013	.008	482	.101	.082	.055	.049	.021	.013	.000					
Transition	492	.106	.059	.033	.038	.004	.001	-.017	492	.089	.054	.033	.038	.004	.001	-.023					
	512	.095	.037	.021	.026	-.007	-.010	-.046	512	.067	.037	.021	.015	.019	-.022	-.046					
	532	.061	.020	-.007	-.008	-.042	-.045	-.058	532	.044	.008	-.007	-.008	-.042	-.045	-.070					
	552	.021	-.021	-.054	-.054	-.082	-.074	-.087	552	-.002	-.026	-.034	-.034	-.082	-.080	-.104					
Flare	562	-.065	-.108	-.129	-.118	-.135	-.126	-.133	562	-.083	-.119	-.135	-.118	-.140	-.138	-.151					
	568	-.111	-.165	-.186	-.181	-.180	-.154	-.144	568	-.150	-.084	-.088	-.083	-.093	-.085	-.098					
	577	-.036	-.072	-.082	-.083	-.093	-.085	-.087	577	-.059	-.055	-.059	-.054	-.070	-.062	-.069					
	587	-.007	-.044	-.053	-.054	-.065	-.056	-.058	587	-.019	-.032	-.036	-.037	-.047	-.039	-.046					
Main stage	607	.009	-.020	-.030	-.031	-.042	-.035	-.035	607	.013	-.032	-.030	.031	.042	.033	.040					
	617	.015	-.020	-.025	-.025	-.036	-.027	-.029	617	.013	-.026	-.025	.025	.036	.027	.035					
	627	.015	-.015	-.019	-.019	-.030	-.022	-.023	627	.007	-.020	-.025	.025	.030	.022	.029					
	637	.026	-.003	-.013	-.014	-.024	-.016	-.017	637	.002	-.015	-.019	.014	.024	.016	.029					
None	657	.028	.001	-.013	-.002	-.019	-.006	-.010	657	.001	-.011	-.019	.002	.019	.012	.025					
	677	.028	.001	-.013	.000	-.015	-.004	-.010	677	.012	-.001	-.009	.002	.017	.004	.021					
	697	.031	.003	.009	.004	.013	.002	-.008	697	.004	-.007	-.013	.002	.015	.008	.023					
	737	.031	.005	.007	.000	.011	-.002	-.010	737	.008	-.003	-.009	.002	.011	.004	.023					
None	777	.035	.010	.003	.004	.009	.002	-.006	777	.014	.001	.005	.006	.007	.000	.021					
	785	.039	.012	.001	.006	.005	.005	-.002	785	.010	.001	.005	.006	.007	.000	.021					
	817	.039	.017	.003	.008	.004	.003	-.004	817	.013	.006	.002	.006	.004	.001	.020					
	857	.033	.010	-.002	.005	-.007	-.001	-.011	857	.007	-.001	.006	.004	.004	.001	.020					
None	877	.035	.012	-.002	.005	-.007	-.001	-.010	877	.004	-.003	.008	.002	.009	.005	.025					
	897	.031	.008	-.005	.002	-.010	-.004	-.014	897	.004	-.004	.009	.001	.010	.009	.025					
									917	.004	-.004	.009	.001	.013	.012	.029					
									957	-.012	-.016	.019	.010	.023	.023	.041					
None									997	-.091	-.077	-.071	-.063	-.080	-.085	-.115					

TABLE 2.1 - PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for $\beta = -60^\circ$						C_p for $\beta = -70^\circ$							
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Nose		.371	.573	.572	.545	.517	.467	.420	.318						
		.381	.423	.404	.378	.350	.305	.264	.173						
		.391	.194	.170	.143	.120	.071	.046	-.029						
		.399	-1.261	-1.292	-1.290	-1.198	-1.215	-1.183	-1.144						
Main stage		.404	.533	.432	.404	.372	.321	.271	.144						
		.409	.242	.289	.373	.448	.504	.530	.732						
		.419	.139	.112	.104	.105	.139	.143	.554						
		.423	-.076	-.049	-.030	-.019	-.036	-.050	-.109						
Upper stage		.439	.030	.003	.004	.021	.034	.010	-.057						
		.449	.010	.037	.050	.061	.039	.024	-.017						
		.459	.141	.156	.152	.152	.118	.104	.080						
		.482	.021	.037	.038	.049	.021	.007	-.046						
Transition		.492	.004	.020	.021	.032	.004	-.010	-.058						
		.512	.002	.003	.004	.015	-.019	-.028	-.075						
		.530	-.030	-.021	-.025	-.014	-.042	-.057	-.099						
		.552	-.088	-.073	-.071	-.060	-.082	-.097	-.145						
Main stage		.562	.152	.142	.141	.118	.140	.149	.192						
		.568	-.021	-.199	.186	.169	.180	.189	.231						
		.577	.123	.101	.088	.083	.093	.102	.133						
		.587	.099	-.078	.065	.054	.070	.074	.110						
Upper stage		.597	.082	-.061	.048	.037	.053	.056	.087						
		.607	-.071	.043	.036	.031	.042	.045	.075						
		.617	-.071	-.049	.030	.025	.036	.039	.069						
		.627	-.065	.044	.030	.019	.030	.039	.063						
Main stage		.637	-.059	.038	.025	.014	.030	.027	.058						
		.657	-.059	.032	.025	.002	.022	.024	.050						
		.677	-.048	.025	.019	.000	.019	.021	.044						
		.697	.036	.019	.013	.002	.015	.018	.039						
Upper stage		.737	.050	.022	.015	.002	.015	.016	.033						
		.777	-.046	.020	.011	.006	.011	.010	.029						
		.785	-.050	.022	.013	.006	.011	.010	.027						
		.817	-.044	.014	.005	.009	.006	.007	.025						
Main stage		.857	.051	.020	.011	.004	.010	.010	.026						
		.877	-.049	.020	.011	.003	.010	.010	.027						
		.897	.050	.020	.012	.002	.012	.013	.028						
		.917	-.059	.028	.017	.003	.017	.016	.032						
Upper stage		.957	-.064	.034	.025	.010	.025	.026	.042						
		.997	-.128	.096	.085	-.064	-.082	-.092	.120						

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

		C_p for -						C_p for -							
		$\beta = 0^\circ$						$\beta = -30^\circ$							
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/z	.813	.728	.663	.600	.531	.457	.363	.371	.775	.709	.655	.592	.539	.461
		.663	.578	.513	.450	.385	.311	.221	.381	.595	.527	.477	.420	.366	.300
Transition		.449	.364	.307	.251	.190	.134	.055	.391	.415	.345	.299	.247	.194	.138
		-1.143	-1.149	-1.149	-1.103	-1.034	-0.958	-0.871	.399	-1.427	-1.173	-0.926	-1.006	-0.775	-0.571
Upper stage		.404	.387	.376	.366	.359	.351	.345	.404	.423	.449	.475	.500	.524	.546
		.409	.466	.500	.515	.519	.519	.519	.409	.524	.684	.700	.665	.624	.577
Flare		.419	.424	.412	.404	.428	.451	.471	.419	.524	.684	.700	.665	.624	.577
		.429	.430	.412	.404	.428	.451	.471	.429	.524	.684	.700	.665	.624	.577
Nose		.439	.437	.427	.418	.408	.394	.370	.429	.524	.684	.700	.665	.624	.577
		.449	.449	.439	.430	.420	.406	.387	.449	.546	.709	.871	.101	.101	.101
Main stage		.459	.459	.449	.440	.430	.416	.397	.459	.546	.709	.871	.101	.101	.101
		.469	.469	.459	.450	.440	.426	.407	.469	.546	.709	.871	.101	.101	.101
Transition		.482	.482	.472	.462	.452	.438	.419	.482	.546	.709	.871	.101	.101	.101
		.492	.492	.482	.472	.462	.448	.429	.492	.546	.709	.871	.101	.101	.101
Flare		.512	.512	.502	.492	.482	.468	.449	.512	.546	.709	.871	.101	.101	.101
		.522	.522	.512	.502	.492	.478	.459	.522	.546	.709	.871	.101	.101	.101
Nose		.532	.532	.522	.512	.502	.488	.469	.532	.546	.709	.871	.101	.101	.101
		.542	.542	.532	.522	.512	.498	.479	.542	.546	.709	.871	.101	.101	.101
Main stage		.568	.568	.558	.548	.538	.524	.505	.568	.546	.709	.871	.101	.101	.101
		.577	.577	.567	.557	.547	.533	.514	.577	.546	.709	.871	.101	.101	.101
Transition		.587	.587	.577	.567	.557	.543	.524	.587	.546	.709	.871	.101	.101	.101
		.597	.597	.587	.577	.567	.553	.534	.597	.546	.709	.871	.101	.101	.101
Flare		.607	.607	.597	.587	.577	.563	.544	.607	.546	.709	.871	.101	.101	.101
		.617	.617	.607	.597	.587	.573	.554	.617	.546	.709	.871	.101	.101	.101
Main stage		.627	.627	.617	.607	.597	.583	.564	.627	.546	.709	.871	.101	.101	.101
		.637	.637	.627	.617	.607	.593	.574	.637	.546	.709	.871	.101	.101	.101
Transition		.647	.647	.637	.627	.617	.603	.584	.647	.546	.709	.871	.101	.101	.101
		.657	.657	.647	.637	.627	.613	.594	.657	.546	.709	.871	.101	.101	.101
Flare		.667	.667	.657	.647	.637	.623	.604	.667	.546	.709	.871	.101	.101	.101
		.677	.677	.667	.657	.647	.633	.614	.677	.546	.709	.871	.101	.101	.101
Main stage		.687	.687	.677	.667	.657	.643	.624	.687	.546	.709	.871	.101	.101	.101
		.697	.697	.687	.677	.667	.653	.634	.697	.546	.709	.871	.101	.101	.101
Transition		.707	.707	.697	.687	.677	.663	.644	.707	.546	.709	.871	.101	.101	.101
		.717	.717	.707	.697	.687	.673	.654	.717	.546	.709	.871	.101	.101	.101
Flare		.727	.727	.717	.707	.697	.683	.664	.727	.546	.709	.871	.101	.101	.101
		.737	.737	.727	.717	.707	.693	.674	.737	.546	.709	.871	.101	.101	.101
Main stage		.747	.747	.737	.727	.717	.703	.684	.747	.546	.709	.871	.101	.101	.101
		.757	.757	.747	.737	.727	.713	.694	.757	.546	.709	.871	.101	.101	.101
Transition		.767	.767	.757	.747	.737	.723	.704	.767	.546	.709	.871	.101	.101	.101
		.777	.777	.767	.757	.747	.733	.714	.777	.546	.709	.871	.101	.101	.101
Flare		.787	.787	.777	.767	.757	.743	.724	.787	.546	.709	.871	.101	.101	.101
		.797	.797	.787	.777	.767	.753	.734	.797	.546	.709	.871	.101	.101	.101
Main stage		.807	.807	.797	.787	.777	.763	.744	.807	.546	.709	.871	.101	.101	.101
		.817	.817	.807	.797	.787	.773	.754	.817	.546	.709	.871	.101	.101	.101
Transition		.827	.827	.817	.807	.797	.783	.764	.827	.546	.709	.871	.101	.101	.101
		.837	.837	.827	.817	.807	.793	.774	.837	.546	.709	.871	.101	.101	.101
Flare		.847	.847	.837	.827	.817	.803	.784	.847	.546	.709	.871	.101	.101	.101
		.857	.857	.847	.837	.827	.813	.794	.857	.546	.709	.871	.101	.101	.101
Main stage		.867	.867	.857	.847	.837	.823	.804	.867	.546	.709	.871	.101	.101	.101
		.877	.877	.867	.857	.847	.833	.814	.877	.546	.709	.871	.101	.101	.101
Transition		.887	.887	.877	.867	.857	.843	.824	.887	.546	.709	.871	.101	.101	.101
		.897	.897	.887	.877	.867	.853	.834	.897	.546	.709	.871	.101	.101	.101
Flare		.907	.907	.897	.887	.877	.863	.844	.907	.546	.709	.871	.101	.101	.101
		.917	.917	.907	.897	.887	.873	.854	.917	.546	.709	.871	.101	.101	.101
Main stage		.927	.927	.917	.907	.897	.883	.864	.927	.546	.709	.871	.101	.101	.101
		.937	.937	.927	.917	.907	.893	.874	.937	.546	.709	.871	.101	.101	.101
Transition		.947	.947	.937	.927	.917	.903	.884	.947	.546	.709	.871	.101	.101	.101
		.957	.957	.947	.937	.927	.913	.894	.957	.546	.709	.871	.101	.101	.101
Flare		.967	.967	.957	.947	.937	.923	.904	.967	.546	.709	.871	.101	.101	.101
		.977	.977	.967	.957	.947	.933	.914	.977	.546	.709	.871	.101	.101	.101
Main stage		.987	.987	.977	.967	.957	.943	.924	.987	.546	.709	.871	.101	.101	.101
		.997	.997	.987	.977	.967	.953	.934	.997	.546	.709	.871	.101	.101	.101

TABLE 2. - PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						
		$\beta = -50^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
	x/l							
Nose	.371	.505	.567	.592	.592	.584	.555	.487
	.391	.194	.229	.250	.247	.235	.217	.168
Upper stage	.399	-.801	-.753	-.720	-.641	-.689	-.746	-.782
	.409	-.612	-.718	-.677	-.665	-.743	-.730	-.766
Upper stage	.419	-.470	-.518	-.535	-.538	-.493	-.477	-.485
	.439	-.143	-.088	-.066	-.108	-.090	-.093	-.135
Upper stage	.459	.060	.115	.125	.111	.117	.103	.061
	.482	-.044	.031	.068	.068	.067	.019	-.044
Transition	.512	-.083	-.019	.007	.007	.010	-.028	-.083
	.552	-.145	-.097	-.075	-.078	-.076	-.113	-.161
Transition	.568	-.400	-.325	-.265	-.237	-.269	-.338	-.412
	.587	-.148	-.104	-.075	-.074	-.079	-.109	-.160
Main stage	.607	-.117	-.069	-.040	-.043	-.040	-.070	-.121
	.627	-.106	-.058	-.028	-.031	-.029	-.058	-.109
Main stage	.657	-.096	-.044	-.022	-.020	-.017	-.047	-.098
	.697	-.089	-.040	-.016	-.013	-.012	-.042	-.089
Main stage	.737	-.083	-.034	-.013	-.009	-.009	-.035	-.084
	.777	-.078	-.031	-.009	-.007	-.007	-.031	-.078
Main stage	.785	-.081	-.034	-.011	-.007	-.009	-.031	-.074
	.817	-.071	-.024	-.003	-.001	-.000	-.026	-.071
Main stage	.857	-.075	-.031	-.008	-.006	-.005	-.032	-.075
	.897	-.078	-.035	-.012	-.009	-.008	-.034	-.078
Main stage	.937	-.050	-.025	-.011	-.008	-.007	-.025	-.050
	.957	-.040	-.032	-.015	-.013	-.013	-.025	-.040
Main stage	.977	-.134	-.103	-.085	-.081	-.082	-.105	-.129
	.997	-.134	-.103	-.085	-.081	-.082	-.105	-.129

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

z/t		C_p for -					
		$\beta = 0^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
Nose		.942	.867	.807	.747	.677	.610
		.811	.733	.670	.616	.551	.482
		.641	.563	.506	.455	.399	.341
		.391	.313	.250	.195	.139	.083
Upper stage		.821	.743	.680	.626	.572	.518
		.697	.619	.556	.492	.438	.384
		.404	.326	.263	.209	.155	.101
		.199	.121	.058	.004	.050	.096
Transition		.882	.804	.741	.677	.613	.549
		.757	.679	.616	.552	.488	.424
		.512	.434	.371	.307	.243	.179
		.267	.189	.126	.062	.000	.036
Main stage		.897	.819	.756	.692	.628	.564
		.772	.694	.631	.567	.503	.439
		.647	.569	.506	.442	.378	.314
		.522	.444	.381	.317	.253	.189

z/t		C_p for -					
		$\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
Nose		.371	.910	.852	.795	.744	.680
		.381	.758	.700	.647	.598	.544
		.399	.606	.548	.500	.452	.408
		.404	.483	.425	.367	.309	.251
Upper stage		.409	.653	.611	.569	.527	.485
		.419	.554	.512	.470	.428	.386
		.429	.473	.431	.389	.347	.305
		.439	.419	.377	.335	.293	.251
Transition		.459	.382	.340	.298	.256	.214
		.469	.352	.310	.268	.226	.184
		.479	.332	.290	.248	.206	.164
		.489	.322	.280	.238	.196	.154
Main stage		.509	.305	.263	.221	.179	.137
		.519	.288	.246	.204	.162	.120
		.529	.271	.229	.187	.145	.103
		.539	.254	.212	.169	.127	.085

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10°

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for $\beta = -60^\circ$										C_p for $\beta = -90^\circ$					
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	.371	.790	.792	.768	.735	.698	.648	.551	.371	.653	.715	.735	.735	.727	.637
	.381	.665	.658	.637	.601	.566	.520	.434	.391	.394	.438	.452	.444	.425	.378
	.399	.507	.500	.476	.452	.420	.377	.303	.399	.697	.680	.681	.680	.665	.667
	.404	.555	.566	.588	.603	.622	.648	.685							
	.409	.645	.617	.596	.577	.557	.537	.517							
Transition	.419	.742	.801	.841	.899	.927	.942	.962	.419	.614	.639	.649	.661	.661	.632
	.429	.697	.754	.811	.870	.904	.929	.949	.439	.597	.639	.680	.734	.786	.628
	.439	.663	.719	.776	.833	.870	.904	.933	.459	.603	.669	.734	.786	.833	.667
	.449	.633	.689	.746	.803	.840	.874	.903	.482	.586	.653	.715	.767	.814	.637
	.459	.604	.660	.717	.774	.811	.845	.874	.512	.565	.632	.694	.746	.793	.607
Nose	.469	.574	.631	.688	.745	.792	.829	.858	.552	.583	.625	.662	.699	.736	.550
	.482	.543	.600	.657	.714	.761	.798	.827	.568	.594	.636	.673	.710	.747	.567
	.492	.553	.610	.667	.724	.771	.808	.837	.587	.613	.655	.692	.729	.766	.587
	.502	.563	.620	.677	.734	.781	.818	.847	.607	.633	.675	.712	.749	.786	.607
	.512	.573	.630	.687	.744	.791	.828	.857	.627	.653	.695	.732	.769	.806	.627

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$									
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nozzle	371	1.071	.992	.929	.870	.805	.739	.654	
	381	.951	.873	.812	.756	.696	.633	.554	
Upper stage	391	.803	.732	.670	.624	.574	.519	.450	
	404	.496	.560	.597	.627	.654	.672	.694	
Transition	409	.341	.441	.499	.548	.588	.620	.653	
	419	.148	.267	.339	.404	.461	.512	.564	
Flare	429	.064	.164	.230	.293	.347	.389	.444	
	439	.031	.112	.165	.211	.246	.270	.285	
Main stage	449	.023	.090	.130	.152	.167	.170	.165	
	459	.029	.154	.109	.087	.074	.064	.031	
Transition	482	.148	.099	.090	.087	.090	.088	.080	
	492	.126	.089	.082	.076	.074	.069	.066	
Flare	512	.115	.086	.076	.073	.053	.048	.039	
	532	.126	.099	.073	.065	.044	.037	.023	
Main stage	552	.139	.105	.076	.052	.036	.021	.012	
	562	.107	.070	.044	.017	.010	.026	.032	
Transition	568	.039	.077	.104	.126	.147	.157	.169	
	577	.053	.102	.120	.137	.144	.138	.141	
Flare	587	.028	.080	.098	.112	.117	.113	.119	
	597	.023	.064	.079	.087	.095	.094	.100	
Main stage	607	.012	.050	.063	.073	.078	.078	.078	
	617	.009	.047	.060	.065	.065	.061	.064	
Transition	627	.007	.047	.052	.060	.056	.050	.053	
	637	.004	.036	.038	.046	.043	.042	.034	
Flare	657	.007	.034	.039	.037	.030	.025	.022	
	677	.003	.011	.028	.024	.027	.015	.017	
Main stage	697	.016	.018	.023	.020	.014	.009	.021	
	737	.003	.012	.014	.026	.022	.022	.009	
Transition	777	.027	.006	.025	.019	.018	.008	.005	
	785	.036	.001	.014	.013	.016	.007	.006	
Flare	817	.029	.002	.000	.009	.005	.005	.015	
	857	.026	.015	.005	.001	.002	.003	.017	
Main stage	877	.036	.001	.003	.001	.002	.003	.023	
	897	.018	.001	.003	.003	.008	.013	.023	

C_p for $\beta = -30^\circ$									
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nozzle	371	1.034	.976	.924	.870	.813	.750		
	381	.901	.846	.795	.747	.695	.639		
Upper stage	391	.768	.716	.666	.624	.577	.527		
	404	.498	.506	.519	.530	.532	.533		
Transition	409	.387	.383	.387	.385	.384	.383		
	419	.193	.253	.323	.385	.439	.484		
Flare	429	.091	.177	.239	.293	.338	.378		
	439	.049	.134	.179	.217	.249	.272		
Main stage	449	.047	.093	.124	.146	.165	.167		
	459	.224	.165	.122	.098	.082	.070		
Transition	482	.107	.083	.087	.087	.090	.080		
	492	.094	.078	.079	.076	.074	.064		
Flare	512	.085	.081	.076	.065	.053	.040		
	532	.096	.089	.071	.060	.044	.032		
Main stage	552	.107	.091	.071	.059	.034	.016		
	562	.091	.070	.044	.017	.010	.031		
Transition	568	.083	.105	.115	.134	.147	.157		
	577	.075	.116	.128	.139	.147	.146		
Flare	587	.053	.085	.098	.106	.117	.121		
	597	.023	.047	.054	.060	.065	.064		
Main stage	607	.039	.061	.068	.076	.078	.078		
	617	.034	.053	.060	.065	.070	.069		
Transition	627	.034	.058	.054	.060	.059	.058		
	637	.028	.053	.046	.049	.048	.047		
Flare	657	.021	.034	.036	.035	.027	.027		
	677	.013	.011	.022	.021	.025	.023		
Main stage	697	.023	.024	.024	.022	.023	.023		
	737	.023	.024	.018	.024	.022	.030		
Transition	777	.005	.005	.021	.014	.022	.027		
	785	.010	.009	.014	.009	.014	.020		
Flare	817	.003	.011	.004	.017	.016	.023		
	857	.001	.007	.005	.008	.007	.021		
Main stage	877	.007	.009	.004	.002	.004	.018		
	897	.007	.007	.002	.005	.006	.020		
Transition	917	.004	.004	.002	.005	.006	.031		
	957	.009	.014	.010	.015	.016	.018		
Flare	997	.008	.018	.031	.034	.077	.083		

TABLE 4.- PRESSURE COEFFICIENTS FOR CONFIGURATION 321 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						C_p for -					
		$\theta = -60^\circ$						$\theta = -50^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
None	x/l	.922	.918	.897	.868	.778	.691	.784	.843	.865	.858	.832	.774
		.811	.798	.778	.748	.668	.588	.564	.610	.624	.617	.599	.551
Upper stage	.391	.673	.668	.650	.624	.554	.484	.391	.324	.313	.304	.300	.312
	.399	.240	.253	.280	.288	.301	.314	.399	.330	.324	.304	.300	.312
Main stage	.404	.563	.585	.600	.616	.626	.640	.419	.384	.388	.398	.392	.387
	.409	.438	.452	.466	.480	.494	.508	.371	.344	.336	.324	.312	.300
Transition	.429	.286	.338	.374	.404	.428	.452	.246	.221	.217	.224	.232	.262
	.439	.183	.226	.260	.293	.325	.356	.045	.037	.068	.066	.032	.064
Flare	.459	.131	.172	.217	.241	.264	.287	.070	.035	.076	.080	.043	.057
	.482	.078	.134	.184	.215	.242	.276	.054	.029	.057	.055	.037	.032
Main stage	.512	.007	.051	.084	.115	.143	.176	.034	.018	.038	.039	.010	.032
	.532	.021	.056	.090	.121	.148	.176	.010	.004	.044	.042	.010	.032
Transition	.562	.007	.016	.028	.041	.054	.067	.015	.008	.044	.042	.010	.032
	.577	.141	.135	.128	.128	.128	.128	.215	.190	.175	.180	.195	.251
Main stage	.587	.124	.121	.106	.106	.106	.106	.182	.146	.117	.122	.149	.212
	.597	.113	.102	.093	.087	.084	.084	.176	.118	.087	.086	.116	.188
Flare	.607	.116	.094	.071	.065	.065	.065	.157	.085	.065	.065	.088	.158
	.617	.116	.094	.071	.065	.065	.065	.157	.085	.065	.065	.088	.158
Main stage	.627	.122	.102	.085	.063	.051	.044	.119	.054	.028	.027	.056	.114
	.637	.111	.084	.052	.049	.044	.044	.119	.054	.028	.027	.056	.114
Transition	.657	.089	.034	.031	.019	.026	.026	.119	.054	.028	.027	.056	.114
	.677	.081	.039	.028	.021	.030	.030	.119	.054	.028	.027	.056	.114
Main stage	.697	.073	.044	.025	.024	.034	.034	.119	.054	.028	.027	.056	.114
	.717	.081	.044	.025	.024	.034	.034	.119	.054	.028	.027	.056	.114
Flare	.737	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.755	.047	.034	.017	.009	.017	.017	.102	.057	.032	.032	.055	.108
Main stage	.775	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.785	.047	.034	.017	.009	.017	.017	.102	.057	.032	.032	.055	.108
Transition	.817	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.837	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
Main stage	.857	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.877	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
Flare	.897	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.917	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
Main stage	.937	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.957	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
Transition	.977	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108
	.997	.051	.035	.023	.014	.022	.022	.102	.057	.032	.032	.055	.108

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

x/l		C_p for - $\phi = 0^\circ$						C_p for - $\phi = -30^\circ$					
		$\phi = 0^\circ$						$\phi = -30^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Nose	.392	-.420	.535	.607	.785	.837	.892	.392	.215	.246	.245	.268	.314
	.402	-.227	.251	.261	.275	.294	.320	.402	.182	.206	.212	.233	.279
	.412	-.182	.219	.224	.243	.264	.292	.412	.149	.174	.179	.201	.251
	.432	.060	.075	.084	.116	.144	.178	.432	.060	.071	.076	.112	.175
	.442	-.041	-.034	-.023	.031	.071	.118	.442	-.053	-.034	-.027	.031	.118
Upper stage	.453	-.168	-.165	-.142	-.056	.001	.058	.453	-.165	-.165	-.147	-.056	.055
	.458	-.357	-.986	-.887	-.840	-.660	-.554	.458	-.903	-.320	-.457	-.827	-.989
	.473	-.222	-.316	-.507	-.729	-.728	-.814	.473	-.211	.131	-.170	-.378	-.720
	.483	-.109	-.140	-.158	-.370	-.186	-.545	.483	-.098	-.034	-.036	-.051	-.542
	.493	-.018	-.034	-.036	-.073	-.105	-.037	.493	-.018	.017	.019	.057	-.031
Transition Flare	.503	.027	.017	.015	.053	.134	.114	.503	.027	.063	.065	.097	.124
	.513	.061	.063	.065	.093	.134	.233	.513	.063	.136	.141	.169	.240
	.525	.129	.132	.132	.162	.198	.343	.525	.129	.293	.292	.317	.352
	.535	.265	.283	.288	.302	.324		.535	.276				
	.545	.118	.150	.157	.179	.211	.287	.545	.129	.150	.153	.176	.284
Main stage	.555	.061	.072	.069	.089	.120	.185	.555	.061	.067	.069	.089	.185
	.565	.016	.012	.011	.035	.063	.127	.565	.005	.003	.002	.021	.111
	.575	-.065	-.077	-.079	-.048	-.005	.056	.575	-.065	-.095	-.096	.067	.040
	.585	.307	.409	.434	.361	.287	.192	.585	.341	.428	.455	.372	.286
	.597	.419	.584	.664	.930	.810	.684	.597	.373	.509	.614	.926	.684
	.607	.121	.160	.172	.183	.181	.566	.607	.121	.160	.172	.180	.579
	.617	.076	.095	.100	.088	.089	.478	.617	.076	.095	.104	.092	.478
	.627	.053	.062	.070	.066	.036	.390	.627	.053	.048	.053	.048	.305
	.637	.030	.044	.053	.052	.022	.269	.637	.030	.044	.040	.041	.253
	.647	.018	.034	.040	.041	.026	.060	.647	.018	.034	.032	.037	.054
	.657	.007	.025	.032	.037	.022	.016	.657	.007	.025	.023	.026	.016
	.667	.003	.008	.013	.015	.019	.019	.667	.003	.016	.017	.020	.017
	.677	.005	.005	.007	.012	.016	.007	.677	.005	.002	.006	.010	.011
	.687	.005	.005	.007	.012	.016	.001	.687	.005	.002	.006	.010	.002
	.697	.005	.005	.007	.012	.016	.001	.697	.005	.002	.006	.010	.002
	.707	.005	.005	.007	.012	.016	.001	.707	.005	.002	.006	.010	.002
	.717	.005	.005	.007	.012	.016	.001	.717	.005	.002	.006	.010	.002
	.727	.005	.005	.007	.012	.016	.001	.727	.005	.002	.006	.010	.002
	.737	.005	.005	.007	.012	.016	.001	.737	.005	.002	.006	.010	.002
	.747	.005	.005	.007	.012	.016	.001	.747	.005	.002	.006	.010	.002
	.757	.005	.005	.007	.012	.016	.001	.757	.005	.002	.006	.010	.002
	.767	.005	.005	.007	.012	.016	.001	.767	.005	.002	.006	.010	.002
	.777	.005	.005	.007	.012	.016	.001	.777	.005	.002	.006	.010	.002
	.787	.005	.005	.007	.012	.016	.001	.787	.005	.002	.006	.010	.002
	.797	.005	.005	.007	.012	.016	.001	.797	.005	.002	.006	.010	.002
	.807	.005	.005	.007	.012	.016	.001	.807	.005	.002	.006	.010	.002
	.817	.005	.005	.007	.012	.016	.001	.817	.005	.002	.006	.010	.002
	.827	.005	.005	.007	.012	.016	.001	.827	.005	.002	.006	.010	.002
	.837	.005	.005	.007	.012	.016	.001	.837	.005	.002	.006	.010	.002
	.847	.005	.005	.007	.012	.016	.001	.847	.005	.002	.006	.010	.002
	.857	.005	.005	.007	.012	.016	.001	.857	.005	.002	.006	.010	.002
	.867	.005	.005	.007	.012	.016	.001	.867	.005	.002	.006	.010	.002
	.877	.005	.005	.007	.012	.016	.001	.877	.005	.002	.006	.010	.002
	.887	.005	.005	.007	.012	.016	.001	.887	.005	.002	.006	.010	.002
	.897	.005	.005	.007	.012	.016	.001	.897	.005	.002	.006	.010	.002

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

		C_p for -					
		$\phi = -50^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/l	.392	.246	.245	.268	.284	.314
		.402	.206	.208	.229	.248	.276
Transition stage	x/l	.412	.165	.171	.194	.214	.244
		.432	.066	.072	.102	.134	.177
Upper stage	x/l	.442	-.044	-.036	.024	.068	.115
		.447	-.067	-.078	-.078	-.088	-.100
Nose	x/l	.453	-1.187	-1.207	-.957	-.818	-.708
		.458	-.269	-.402	-1.027	-.939	-.817
	x/l	.463	-.122	-.128	-.331	-.793	-.697
		.473	-.039	-.036	-.012	-.101	-.558
	x/l	.483	.017	.015	.046	.076	-.015
		.493	.067	.065	.093	.134	.137
	x/l	.503	.136	.137	.165	.198	.240
		.513	.302	.300	.335	.358	.356
	x/l	.525	.141	.140	.165	.198	.268
		.535	.067	.069	.089	.120	.185
	x/l	.545	.005	.003	.021	.052	.111
		.555	-.088	-.109	-.074	-.026	-.040
	x/l	.565	-.341	-.451	-.347	-.265	-.186
		.568	-.491	-.584	.015	-.796	-.671
	x/l	.577	-.121	-.163	.165	-.676	-.579
		.587	-.076	-.104	.092	-.174	-.478
	x/l	.597	-.041	-.057	-.063	-.029	-.384
		.607	-.030	-.044	-.052	-.022	-.256
	x/l	.617	-.018	-.034	-.041	-.026	-.051
		.627	-.019	-.025	-.037	-.026	.001
	x/l	.637	-.007	-.016	-.023	-.026	.016
		.657	-.007	-.012	-.016	-.020	.017
	x/l	.677	-.001	-.007	-.011	-.017	.008
		.697	.005	-.002	-.006	-.014	-.001
	x/l	.737	.005	.000	-.005	-.012	-.009
		.777	.009	.005	.003	-.007	-.007
	x/l	.785	.009	.005	.001	-.003	-.008
		.817	.014	.007	.002	-.005	-.006
	x/l	.857	.011	.003	-.002	-.009	-.012
		.877	.011	.003	-.002	-.010	-.013
	x/l	.897	.009	.002	-.004	-.012	-.015
		.917	.005	-.003	-.011	-.016	-.019
	x/l	.957	-.004	-.010	-.015	-.024	-.026
		.997	-.054	-.066	-.077	-.087	-.098
Main stage	x/l	.382	.249	.291	.294	.314	.334
		.392	-.891	.246	.331	.505	.574
Transition stage	x/l	.412	.149	.165	.171	.194	.214
		.432	.049	.066	.068	.102	.134
Upper stage	x/l	.447	-.202	-.198	-.181	-.081	-.022
		.453	-.811	-1.299	-1.339	-1.034	-.887
Nose	x/l	.473	-.018	-.034	-.036	.007	-.094
		.493	.061	.063	.061	.090	.131
	x/l	.513	.287	.306	.304	.339	.365
		.535	.050	.067	.069	.089	.120
	x/l	.565	-.341	-.438	-.459	-.358	-.275
		.568	-.396	-.565	-.673	-.933	-.813
	x/l	.587	-.076	-.099	-.104	-.092	-.177
		.607	-.030	-.044	-.049	-.052	-.253
	x/l	.627	-.018	-.025	-.032	-.034	.004
		.657	-.007	-.012	-.017	-.020	.016
	x/l	.697	.001	-.005	-.010	-.013	-.017
		.737	.005	.000	-.005	-.008	-.012
	x/l	.777	.009	.005	-.002	-.004	-.008
		.785	.009	.003	.000	-.004	-.009
	x/l	.817	.014	.009	.004	.001	-.004
		.857	.011	.003	-.001	-.004	-.012
	x/l	.897	.008	.001	-.004	-.007	-.012
		.917	.008	.001	-.004	-.007	-.012
	x/l	.957	.008	.001	-.004	-.007	-.012
		.997	.008	.001	-.004	-.007	-.012

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(3) $M = 0.60$; $\alpha = -10^\circ$ to 10°

		C_p for - $\beta = 0^\circ$							C_p for - $\beta = -30^\circ$						
		$\alpha = 0^\circ$							$\alpha = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/l														
		.382	.368	.346	.336	.336	.330	.330	.392	.374	.277	.224	.189	.144	.076
		.392	.308	.277	.229	.189	.144	.093	.402	.334	.279	.190	.150	.105	.042
		.402	.339	.254	.195	.155	.110	.059	.412	.295	.203	.156	.116	.071	.009
Flare	x/l														
		.412	.334	.256	.162	.116	.076	.026	.432	.295	.199	.138	.102	.054	.009
		.432	.233	.155	.113	.060	.020	.067	.442	.295	.199	.138	.102	.054	.009
		.442	.120	.042	.000	.000	.026	.067	.442	.295	.199	.138	.102	.054	.009
Transition	x/l														
		.447	.004	.090	.049	.000	.026	.067	.447	.004	.090	.049	.000	.026	.067
		.453	.004	.090	.049	.000	.026	.067	.453	.004	.090	.049	.000	.026	.067
		.453	.004	.090	.049	.000	.026	.067	.453	.004	.090	.049	.000	.026	.067
Rear	x/l														
		.453	.004	.090	.049	.000	.026	.067	.453	.004	.090	.049	.000	.026	.067
		.453	.004	.090	.049	.000	.026	.067	.453	.004	.090	.049	.000	.026	.067
		.453	.004	.090	.049	.000	.026	.067	.453	.004	.090	.049	.000	.026	.067

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$							
		x/l							$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	Transition	.392	.255	.248	.224	.195	.155	.071	.382	.239	.265	.274	.268	.240	.178
		.402	.227	.222	.190	.161	.116	.042	.412	.121	.147	.150	.144	.122	.059
		.412	.193	.189	.175	.150	.122	.009	.432	.004	.045	.049	.043	.026	.038
		.422	.092	.087	.079	.049	.026	.084	.442	.004	.031	.049	.043	.026	.038
Transition	Flare	.432	.092	.087	.079	.049	.026	.084	.442	.004	.031	.049	.043	.026	.038
		.442	.016	.015	.008	.006	.004	.002	.447	.004	.031	.049	.043	.026	.038
		.452	.011	.010	.006	.004	.002	.001	.457	.004	.031	.049	.043	.026	.038
		.462	.006	.005	.003	.002	.001	.001	.467	.004	.031	.049	.043	.026	.038
Rear stage	Rear stage	.472	.001	.001	.001	.001	.001	.001	.477	.004	.031	.049	.043	.026	.038
		.482	.001	.001	.001	.001	.001	.001	.487	.004	.031	.049	.043	.026	.038
		.492	.001	.001	.001	.001	.001	.001	.497	.004	.031	.049	.043	.026	.038
		.502	.001	.001	.001	.001	.001	.001	.507	.004	.031	.049	.043	.026	.038
Rear stage	Rear stage	.512	.001	.001	.001	.001	.001	.001	.517	.004	.031	.049	.043	.026	.038
		.522	.001	.001	.001	.001	.001	.001	.527	.004	.031	.049	.043	.026	.038
		.532	.001	.001	.001	.001	.001	.001	.537	.004	.031	.049	.043	.026	.038
		.542	.001	.001	.001	.001	.001	.001	.547	.004	.031	.049	.043	.026	.038

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

x/l		C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$									
		$\alpha = 0^\circ$					$\alpha = 30^\circ$					$\alpha = 0^\circ$					$\alpha = 30^\circ$				
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nose		.382	.727	.718	.713	.704	.696	.683	.678	.392	.408	.346	.303	.267	.218	.171	.105				
		.392	.443	.372	.319	.271	.218	.175	.124	.402	.367	.278	.231	.229	.180	.133	.067				
		.402	.416	.338	.284	.241	.188	.141	.090	.412	.332	.278	.231	.195	.142	.095	.033				
		.412	.374	.293	.243	.199	.146	.099	.052	.432	.330	.175	.133	.100	.051	.004	.056				
Transition		.432	.272	.194	.144	.104	.055	.008	-.040	.442	.330	.175	.133	.100	.037	-.086	-.143				
		.442	.165	.092	.049	.009	-.041	-.082	-.127	.442	.330	.175	.133	.100	.037	-.086	-.143				
		.447	.051	-.015	-.059	-.097	-.140	-.180	-.217	.447	.330	.175	.133	.100	.037	-.086	-.143				
		.453	.793	.829	.801	.796	.788	.812	.858	.453	.401	-.031	-.067	-.101	-.140	-.180	-.229				
Main stage		.458	.664	.712	.714	.714	.717	.706	.634	.458	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.463	.479	.457	.406	.325	.306	.306	.308	.463	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.473	.010	.016	-.010	-.025	-.046	-.079	-.079	.473	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.483	.056	.032	.036	.033	.032	.032	.030	.483	.340	-.443	-.482	-.500	-.546	-.551	-.565				
Flare		.493	.082	.077	.083	.075	.074	.074	.076	.493	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.503	.192	.163	.151	.152	.137	.128	.119	.503	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.513	.413	.361	.329	.303	.261	.225	.189	.513	.340	-.443	-.482	-.500	-.546	-.551	-.565				
		.525	.288	.236	.197	.171	.137	.109	.092	.525	.238	.207	.185	.168	.137	.105	.072				
Transition		.535	.203	.151	.116	.086	.052	.024	.007	.535	.176	.136	.108	.083	.052	.020	.009				
		.545	.153	.089	.059	.028	.006	.043	.064	.545	.114	.070	.039	.017	.022	.055	.088				
		.555	.072	.012	.032	.062	.105	.141	.159	.555	.018	-.023	-.051	-.082	.020	.157	.191				
		.565	.274	.343	.383	.417	.456	.469	.443	.565	.329	.370	.407	.433	.468	.496	.518				
Main stage		.568	.829	.909	.930	.858	.751	.658	.581	.568	.880	.949	.957	.897	.826	.787	.683				
		.577	.123	.156	.169	.179	.190	.191	.181	.577	.147	.156	.169	.175	.186	.191	.181				
		.587	.060	.086	.098	.101	.112	.109	.099	.587	.092	.097	.106	.105	.112	.117	.111				
		.597	.033	.058	.067	.069	.077	.074	.064	.597	.037	.050	.055	.050	.061	.058	.052				
Flare		.607	.017	.039	.051	.050	.057	.054	.040	.607	.041	.046	.051	.050	.057	.058	.052				
		.617	.006	.031	.039	.038	.045	.042	.032	.617	.029	.039	.039	.038	.045	.042	.044				
		.627	.002	.019	.031	.030	.037	.035	.021	.627	.025	.031	.035	.030	.037	.039	.032				
		.637	.013	.011	.020	.018	.026	.023	.013	.637	.017	.023	.027	.022	.030	.031	.029				
Main stage		.657	.019	.002	.014	.013	.015	.012	.009	.657	.008	.015	.020	.016	.019	.020	.027				
		.677	.022	.001	.012	.010	.013	.010	.006	.677	.005	.002	.008	.005	.009	.014	.022				
		.697	.026	.003	.008	.006	.009	.007	.005	.697	.000	.007	.008	.006	.009	.014	.022				
		.737	.026	.003	.007	.004	.005	.007	.006	.737	.004	.003	.008	.003	.006	.010	.027				
Transition		.777	.031	.009	.001	.001	.002	.002	.005	.777	.004	.006	.004	.004	.007	.007	.026				
		.785	.038	.015	.004	.005	.003	.005	.006	.785	.009	.003	.000	.004	.002	.005	.023				
		.817	.039	.017	.005	.006	.001	.001	.001	.817	.012	.006	.002	.004	.000	.008	.027				
		.857	.042	.010	.000	.002	.002	.005	.006	.857	.005	.001	.004	.000	.004	.000	.027				
Main stage		.877	.034	.000	.000	.002	.002	.005	.006	.877	.003	.003	.006	.002	.006	.013	.030				
		.897	.034	.000	.000	.002	.001	.005	.005	.897	.003	.003	.006	.002	.006	.015	.032				
		.917	.034	.000	.000	.002	.001	.005	.005	.917	.004	.003	.006	.002	.008	.019	.033				
		.957	.034	.000	.000	.002	.001	.005	.005	.957	.011	.015	.016	.012	.020	.031	.045				
Flare		.977	.030	.007	.007	.000	.005	.008	.010	.977	.091	.082	.075	.068	.081	.097	.122				
		.987	.030	.007	.007	.000	.005	.008	.010	.987	.091	.082	.075	.068	.081	.097	.122				
		.997	.030	.007	.007	.000	.005	.008	.010	.997	.091	.082	.075	.068	.081	.097	.122				
		.997	.030	.007	.007	.000	.005	.008	.010	.997	.091	.082	.075	.068	.081	.097	.122				

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for $\beta = -60^\circ$										C_p for $\beta = -90^\circ$									
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Nozzle	.392	.291	.293	.277	.259	.226	.183	.105	.382	.211	.278	.296	.309	.302	.277				
	.402	.260	.255	.243	.225	.188	.145	.071	.412	.105	.160	.178	.187	.176	.148				
	.432	.127	.130	.110	.092	.059	.016	-.056	.432	.021	.073	.083	.092	.078	.054				
	.442	.029	.027	.019	-.003	-.033	-.074	-.139	.447	-.202	-.157	-.138	-.128	-.136	-.160				
	.453	-.123	-.094	-.079	-.073	-.081	-.094	-.119	.453	-.193	-.186	-.195	-.190	-.213	-.251				
Upper stage	.458	-.1039	-.1545	-.1057	-.1068	-.1099	-.1115	-.1160	.473	-.122	-.062	-.031	-.014	-.029	-.122				
	.463	-.460	-.645	-.677	-.687	-.686	-.710	-.693	.493	-.021	.039	.062	.079	.064	-.032				
	.473	-.083	-.050	-.027	-.006	-.018	-.046	-.094	.513	.242	.299	.317	.327	.312	.287				
	.483	-.033	.004	.019	.032	.021	.001	-.044											
	.493	-.026	.059	.070	.083	.072	.051	.011											
Transition	.503	.103	.136	.147	.156	.137	.113	.072											
	.513	.304	.322	.325	.319	.292	.260	.208											
	.525	.114	.151	.162	.160	.129	.093	.034											
	.535	.083	.097	.089	.083	.056	.020	-.033	.535	.002	.055	.077	.083	.071	.039				
	.545	.025	.035	.027	.017	-.014	-.051	-.100											
Main stage	.555	-.076	-.066	-.068	-.093	-.106	-.143	-.192	.565	-.471	-.442	-.430	-.421	-.428	-.449				
	.565	-.377	-.382	-.403	-.409	-.440	-.465	-.506	.568	-.1033	-.984	-.953	-.924	-.955	-.1024				
	.568	-.959	-.968	-.953	-.924	-.904	-.960	-.989											
	.577	-.186	-.168	-.165	.159	-.179	-.191	-.213											
	.597	-.151	-.121	-.110	-.105	-.116	-.133	-.154	.587	-.182	-.133	-.114	-.105	-.120	-.144				
Main stage	.607	-.115	-.086	-.075	-.065	-.077	-.093	-.123											
	.617	-.096	-.070	-.055	-.050	-.057	-.074	-.103	.607	-.131	-.078	-.059	-.050	-.061	-.090				
	.627	-.092	-.058	-.047	-.038	-.049	-.062	-.091											
	.637	-.084	-.054	-.039	-.030	-.041	-.054	-.083	.627	-.115	-.058	-.039	-.030	-.041	-.066				
	.657	-.076	-.046	-.031	-.022	-.033	-.050	-.076											
Main stage	.677	-.068	-.036	-.025	-.014	-.023	-.037	-.065	.657	-.097	-.048	-.026	-.016	-.027	-.050				
	.677	-.055	-.028	-.018	-.010	-.018	-.033	-.058											
	.697	-.041	-.019	-.012	-.005	-.014	-.029	-.051	.697	-.091	-.039	-.020	-.008	-.018	-.043				
	.737	-.033	-.022	-.012	-.001	-.010	-.023	-.042	.737	-.082	-.033	-.014	-.003	-.011	-.035				
	.785	-.047	.018	.007	.003	.006	.018	.035	.777	-.077	-.030	-.011	.003	.009	-.086				
Main stage	.817	.045	.022	.008	.003	.003	.016	.031	.785	-.080	-.033	-.011	.001	.009	-.076				
	.857	-.050	-.021	-.003	.005	.003	.014	.028	.817	-.029	.023	-.004	.006	.003	-.070				
	.877	-.050	-.021	-.007	.001	.006	.018	.031	.857	-.074	-.028	-.010	.001	.009	-.076				
	.897	-.052	.021	-.008	.001	.006	.018	.030											
	.917	-.058	-.021	-.009	.000	.008	.019	.032	.897	-.075	-.031	-.012	-.002	-.011	-.077				
Main stage	.937	-.064	-.028	.015	-.005	.013	.024	-.035											
	.957	-.064	-.036	-.022	-.012	.021	-.033	-.046											
	.977	-.133	-.100	-.086	-.070	-.083	-.104	-.128											

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for - $\beta = 0^\circ$							C_p for - $\beta = -50^\circ$						
		$\alpha = 0^\circ$							$\alpha = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l
Main stage	Transition	.382	.370	.380	.392	1.006	1.013	.392	.509	.448	.406	.367	.322	.279	.216
		.392	.415	.370	.325	.282	.228	.402	.473	.420	.375	.331	.292	.245	.183
		.402	.442	.346	.298	.255	.201	.412	.446	.387	.348	.307	.259	.218	.153
		.412	.462	.310	.265	.221	.165	.432	.367	.315	.276	.240	.198	.155	.086
Transition	Flare	.432	.491	.247	.198	.155	.101	.442	.304	.254	.221	.189	.150	.107	.047
		.442	.527	.189	.147	.110	.059	.447	.234	.194	.164	.132	.102	.061	.011
		.458	.573	.135	.099	.064	.020	.453	.234	.194	.164	.132	.102	.061	.011
		.463	.605	.089	.054	.021	.000	.458	.234	.194	.164	.132	.102	.061	.011
Nose	Upper stage	.473	.636	.070	.044	.021	.000	.463	.234	.194	.164	.132	.102	.061	.011
		.483	.673	.067	.044	.021	.000	.473	.234	.194	.164	.132	.102	.061	.011
		.493	.720	.063	.044	.021	.000	.483	.234	.194	.164	.132	.102	.061	.011
		.503	.773	.061	.044	.021	.000	.493	.234	.194	.164	.132	.102	.061	.011
Nose	Main stage	.513	.836	.059	.044	.021	.000	.513	.234	.194	.164	.132	.102	.061	.011
		.525	.905	.057	.044	.021	.000	.525	.234	.194	.164	.132	.102	.061	.011
		.535	.980	.055	.044	.021	.000	.535	.234	.194	.164	.132	.102	.061	.011
		.545	1.060	.053	.044	.021	.000	.545	.234	.194	.164	.132	.102	.061	.011

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for -						
		$\beta = -60^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage		.392	.396	.381	.361	.331	.291	.216
		.402	.366	.351	.331	.301	.261	.183
		.412	.340	.321	.304	.271	.230	.153
		.432	.268	.255	.237	.201	.164	.086
		.447	.207	.209	.186	.153	.119	.044
Upper stage		.453	.192	.193	.132	.138	.155	.186
		.458	.155	.156	.106	.109	.115	.164
		.463	.156	.156	.106	.109	.115	.164
		.473	.156	.156	.106	.109	.115	.164
		.483	.156	.156	.106	.109	.115	.164
Flare		.493	.156	.156	.106	.109	.115	.164
		.503	.156	.156	.106	.109	.115	.164
		.513	.156	.156	.106	.109	.115	.164
		.523	.156	.156	.106	.109	.115	.164
		.535	.156	.156	.106	.109	.115	.164
Nozzle		.545	.156	.156	.106	.109	.115	.164
		.555	.156	.156	.106	.109	.115	.164
		.565	.156	.156	.106	.109	.115	.164
		.577	.156	.156	.106	.109	.115	.164
		.587	.156	.156	.106	.109	.115	.164

TABLE 3.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Continued

(a) $M = 1.20$; $\alpha = -10^\circ$ to 10°

x/l		C_p for - $\theta = 0^\circ$							x/l	C_p for - $\theta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
None		.382	1.308	1.290	1.275	1.259	1.227	1.198	.392	.477	.403	.361	.307	.276	.227	.183
		.392	.512	.422	.372	.315	.268	.227	.402	.474	.406	.361	.307	.278	.227	.186
		.402	.523	.430	.377	.321	.281	.235	.412	.474	.406	.358	.313	.278	.235	.183
		.412	.509	.425	.366	.315	.278	.235	.432	.458	.401	.350	.313	.270	.238	.183
Main stage		.432	.499	.419	.361	.315	.270	.235	.442	.440	.390	.348	.318	.276	.233	.183
		.442	.493	.403	.353	.318	.270	.230	.442	.440	.390	.348	.318	.276	.233	.175
		.442	.472	.403	.353	.318	.270	.230	.442	.440	.390	.348	.318	.276	.233	.175
		.442	.472	.403	.353	.318	.270	.230	.442	.440	.390	.348	.318	.276	.233	.175
Transition		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
Flare		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
Upper stage		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
Main stage		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
Transition		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
Flare		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
None		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536
		.453	.477	.376	.337	.305	.262	.222	.453	.469	.478	.484	.492	.505	.519	.536

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 122 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for $\beta = -50^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/l	.382	.254	.307	.318	.308	.297	.267
		.382	.254	.307	.318	.308	.297	.267
Transition	x/l	.412	.257	.310	.307	.303	.284	.245
		.412	.257	.310	.307	.303	.284	.245
Upper stage	x/l	.432	.254	.305	.315	.303	.292	.232
		.432	.254	.305	.315	.303	.292	.232
Nose	x/l	.447	.192	.275	.280	.276	.252	.191
		.447	.192	.275	.280	.276	.252	.191
Main stage	x/l	.453	.344	.303	.308	.319	.344	.381
		.453	.344	.303	.308	.319	.344	.381
Transition	x/l	.473	.282	.247	.247	.260	.271	.302
		.473	.282	.247	.247	.260	.271	.302
Upper stage	x/l	.493	.216	.151	.145	.150	.175	.231
		.493	.216	.151	.145	.150	.175	.231
Nose	x/l	.513	.188	.269	.264	.270	.243	.168
		.513	.188	.269	.264	.270	.243	.168
Main stage	x/l	.535	.155	.224	.258	.250	.212	.137
		.535	.155	.224	.258	.250	.212	.137
Transition	x/l	.565	.048	.097	.091	.095	.084	.036
		.565	.048	.097	.091	.095	.084	.036
Upper stage	x/l	.568	.326	.280	.280	.282	.293	.330
		.568	.326	.280	.280	.282	.293	.330
Nose	x/l	.587	.248	.196	.191	.198	.223	.274
		.587	.248	.196	.191	.198	.223	.274
Main stage	x/l	.607	.218	.141	.132	.140	.165	.227
		.607	.218	.141	.132	.140	.165	.227
Transition	x/l	.627	.193	.102	.096	.098	.126	.194
		.627	.193	.102	.096	.098	.126	.194
Upper stage	x/l	.657	.148	.047	.039	.045	.081	.148
		.657	.148	.047	.039	.045	.081	.148
Nose	x/l	.697	.139	.046	.039	.050	.075	.141
		.697	.139	.046	.039	.050	.075	.141
Main stage	x/l	.737	.114	.038	.032	.035	.064	.120
		.737	.114	.038	.032	.035	.064	.120
Transition	x/l	.777	.077	.047	.017	.023	.049	.103
		.777	.077	.047	.017	.023	.049	.103
Upper stage	x/l	.785	.088	.051	.014	.023	.041	.090
		.785	.088	.051	.014	.023	.041	.090
Nose	x/l	.817	.079	.028	.010	.018	.029	.088
		.817	.079	.028	.010	.018	.029	.088
Main stage	x/l	.857	.082	.017	.005	.006	.026	.075
		.857	.082	.017	.005	.006	.026	.075
Transition	x/l	.897	.086	.039	.005	.006	.026	.075
		.897	.086	.039	.005	.006	.026	.075
Upper stage	x/l	.917	.068	.018	.005	.006	.026	.075
		.917	.068	.018	.005	.006	.026	.075
Nose	x/l	.937	.060	.041	.053	.068	.101	.168
		.937	.060	.041	.053	.068	.101	.168

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

x/l		C_p for -				
		$\beta = 0^\circ$				
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.95$
Nose	.411					
	.421					
	.431					
	.441					
Upper stage	.458					
	.463					
	.473					
	.483					
Transition	.493					
	.503					
	.513					
	.525					
Main stage	.535					
	.545					
	.555					
	.565					
Flare	.577					
	.587					
	.597					
	.607					
Transition	.617					
	.627					
	.637					
	.647					
Main stage	.657					
	.667					
	.677					
	.687					
Transition	.697					
	.707					
	.717					
	.727					
Main stage	.737					
	.747					
	.757					
	.767					
Transition	.777					
	.787					
	.797					
	.807					
Main stage	.817					
	.827					
	.837					
	.847					
Transition	.857					
	.867					
	.877					
	.887					
Main stage	.897					
	.907					
	.917					
	.927					
Transition	.937					
	.947					
	.957					
	.967					
Main stage	.977					
	.987					
	.997					
	1.007					

x/l		C_p for -				
		$\beta = -30^\circ$				
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.95$
Nose	.421					
	.431					
	.441					
	.453					
Upper stage	.458					
	.463					
	.473					
	.483					
Transition	.493					
	.503					
	.513					
	.525					
Main stage	.535					
	.545					
	.555					
	.565					
Flare	.577					
	.587					
	.597					
	.607					
Transition	.617					
	.627					
	.637					
	.647					
Main stage	.657					
	.667					
	.677					
	.687					
Transition	.697					
	.707					
	.717					
	.727					
Main stage	.737					
	.747					
	.757					
	.767					
Transition	.777					
	.787					
	.797					
	.807					
Main stage	.817					
	.827					
	.837					
	.847					
Transition	.857					
	.867					
	.877					
	.887					
Main stage	.897					
	.907					
	.917					
	.927					
Transition	.937					
	.947					
	.957					
	.967					
Main stage	.977					
	.987					
	.997					
	1.007					

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

		C_p for -					C_p for -				
		$\beta = -60^\circ$					$\beta = -50^\circ$				
		$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/z										
Transition flare	x/z										
Upper stage	x/z										
Nose	x/z										
Main stage	x/z										
Transition flare	x/z										
Upper stage	x/z										
Nose	x/z										

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

		C_p for -						C_p for -					
		$\beta = 0^\circ$						$\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
Main stage	$x/1$	.631	.547	.484	.419	.353	.285	.421	.428	.371	.322	.262	.200
		.546	.451	.388	.328	.257	.200	.399	.332	.269	.226	.166	.109
Transition		.421	.326	.263	.209	.138	.086	.431	.379	.322	.273	.224	.179
		.297	.201	.139	.090	.019	-.027	.251	.179	.122	.073	.024	-.027
Flare		.246	.135	.071	.019	-.038	-.090	.121	.044	-.040	-.141	-.246	-.353
		.079	-.079	-.136	-.177	-.242	-.317	.453	.344	.208	.066	-.088	-.200
Nose		.008	-.031	-.055	-.053	-.062	-.068	.458	.344	.208	.066	-.088	-.200
		.054	.015	-.003	.000	.004	.004	.473	.344	.208	.066	-.088	-.200
Upper stage		.101	.061	.044	.052	.047	.042	.483	.344	.208	.066	-.088	-.200
		.170	.136	.113	.115	.100	.094	.493	.344	.208	.066	-.088	-.200
Lower stage		.372	.321	.286	.265	.221	.192	.513	.344	.208	.066	-.088	-.200
		.244	.194	.159	.132	.100	.077	.525	.344	.208	.066	-.088	-.200
Main stage		.525	.441	.378	.313	.257	.200	.535	.344	.208	.066	-.088	-.200
		.441	.357	.294	.229	.173	.116	.545	.344	.208	.066	-.088	-.200
Transition		.357	.273	.210	.145	.089	.032	.555	.344	.208	.066	-.088	-.200
		.273	.189	.126	.061	.005	-.052	.565	.344	.208	.066	-.088	-.200
Flare		.189	.105	.042	-.024	-.089	-.156	.577	.344	.208	.066	-.088	-.200
		.105	.021	-.042	-.108	-.173	-.239	.587	.344	.208	.066	-.088	-.200
Nose		.021	-.058	-.116	-.181	-.246	-.312	.597	.344	.208	.066	-.088	-.200
		-.058	-.116	-.181	-.246	-.312	-.378	.607	.344	.208	.066	-.088	-.200
Main stage		-.116	-.181	-.246	-.312	-.378	-.444	.617	.344	.208	.066	-.088	-.200
		-.181	-.246	-.312	-.378	-.444	-.510	.627	.344	.208	.066	-.088	-.200
Transition		-.246	-.312	-.378	-.444	-.510	-.574	.637	.344	.208	.066	-.088	-.200
		-.312	-.378	-.444	-.510	-.574	-.638	.647	.344	.208	.066	-.088	-.200
Flare		-.378	-.444	-.510	-.574	-.638	-.695	.657	.344	.208	.066	-.088	-.200
		-.444	-.510	-.574	-.638	-.695	-.752	.667	.344	.208	.066	-.088	-.200
Nose		-.510	-.574	-.638	-.695	-.752	-.809	.677	.344	.208	.066	-.088	-.200
		-.574	-.638	-.695	-.752	-.809	-.866	.687	.344	.208	.066	-.088	-.200
Main stage		-.638	-.695	-.752	-.809	-.866	-.923	.697	.344	.208	.066	-.088	-.200
		-.695	-.752	-.809	-.866	-.923	-.980	.707	.344	.208	.066	-.088	-.200
Transition		-.752	-.809	-.866	-.923	-.980	-.1038	.717	.344	.208	.066	-.088	-.200
		-.809	-.866	-.923	-.980	-.1038	-.1095	.727	.344	.208	.066	-.088	-.200
Flare		-.866	-.923	-.980	-.1038	-.1095	-.1152	.737	.344	.208	.066	-.088	-.200
		-.923	-.980	-.1038	-.1095	-.1152	-.1209	.747	.344	.208	.066	-.088	-.200
Nose		-.980	-.1038	-.1095	-.1152	-.1209	-.1266	.757	.344	.208	.066	-.088	-.200
		-.1038	-.1095	-.1152	-.1209	-.1266	-.1323	.767	.344	.208	.066	-.088	-.200
Main stage		-.1095	-.1152	-.1209	-.1266	-.1323	-.1380	.777	.344	.208	.066	-.088	-.200
		-.1152	-.1209	-.1266	-.1323	-.1380	-.1437	.787	.344	.208	.066	-.088	-.200
Transition		-.1209	-.1266	-.1323	-.1380	-.1437	-.1494	.797	.344	.208	.066	-.088	-.200
		-.1266	-.1323	-.1380	-.1437	-.1494	-.1551	.807	.344	.208	.066	-.088	-.200
Flare		-.1323	-.1380	-.1437	-.1494	-.1551	-.1608	.817	.344	.208	.066	-.088	-.200
		-.1380	-.1437	-.1494	-.1551	-.1608	-.1665	.827	.344	.208	.066	-.088	-.200
Nose		-.1437	-.1494	-.1551	-.1608	-.1665	-.1722	.837	.344	.208	.066	-.088	-.200
		-.1494	-.1551	-.1608	-.1665	-.1722	-.1779	.847	.344	.208	.066	-.088	-.200
Main stage		-.1551	-.1608	-.1665	-.1722	-.1779	-.1836	.857	.344	.208	.066	-.088	-.200
		-.1608	-.1665	-.1722	-.1779	-.1836	-.1893	.867	.344	.208	.066	-.088	-.200
Transition		-.1665	-.1722	-.1779	-.1836	-.1893	-.1950	.877	.344	.208	.066	-.088	-.200
		-.1722	-.1779	-.1836	-.1893	-.1950	-.2007	.887	.344	.208	.066	-.088	-.200
Flare		-.1779	-.1836	-.1893	-.1950	-.2007	-.2064	.897	.344	.208	.066	-.088	-.200
		-.1836	-.1893	-.1950	-.2007	-.2064	-.2121	.907	.344	.208	.066	-.088	-.200
Nose		-.1893	-.1950	-.2007	-.2064	-.2121	-.2178	.917	.344	.208	.066	-.088	-.200
		-.1950	-.2007	-.2064	-.2121	-.2178	-.2235	.927	.344	.208	.066	-.088	-.200
Main stage		-.2007	-.2064	-.2121	-.2178	-.2235	-.2292	.937	.344	.208	.066	-.088	-.200
		-.2064	-.2121	-.2178	-.2235	-.2292	-.2349	.947	.344	.208	.066	-.088	-.200
Transition		-.2121	-.2178	-.2235	-.2292	-.2349	-.2406	.957	.344	.208	.066	-.088	-.200
		-.2178	-.2235	-.2292	-.2349	-.2406	-.2463	.967	.344	.208	.066	-.088	-.200
Flare		-.2235	-.2292	-.2349	-.2406	-.2463	-.2520	.977	.344	.208	.066	-.088	-.200
		-.2292	-.2349	-.2406	-.2463	-.2520	-.2577	.987	.344	.208	.066	-.088	-.200
Nose		-.2349	-.2406	-.2463	-.2520	-.2577	-.2634	.997	.344	.208	.066	-.088	-.200
		-.2406	-.2463	-.2520	-.2577	-.2634	-.2691	.997	.344	.208	.066	-.088	-.200

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(b) $M = 0.60$; $\alpha = -1.5^\circ$ to 10° - Concluded

x/l		C_p for -						C_p for -					
		$\beta = -60^\circ$						$\beta = -50^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
Main stage		.421	.365	.343	.317	.279	.222	.411	.388	.405	.413	.393	.364
		.431	.285	.241	.220	.183	.143	.431	.201	.212	.220	.206	.177
		.441	.155	.105	.085	.047	.002	.441	.025	.065	.079	.070	.047
		.453	-1.299	-1.368	-1.419	-1.429	-1.453	.453	-1.585	-1.562	-1.507	-1.505	-1.558
Transition		.458	.345	.297	.274	.242	.201	.473	.083	.072	.058	.068	.085
		.463	.166	.182	.174	.162	.135	.473	.083	.072	.058	.068	.085
		.473	.090	.066	.058	.068	.085	.473	.083	.072	.058	.068	.085
		.483	.038	.014	.000	.010	.027	.493	.015	.032	.012	.037	.013
Flare		.493	.014	.038	.052	.037	.025	.493	.015	.032	.012	.037	.013
		.503	.078	.107	.115	.106	.088	.513	.205	.263	.271	.268	.250
		.513	.268	.281	.265	.245	.221	.513	.205	.263	.271	.268	.250
		.525	.083	.113	.121	.094	.065	.535	.027	.044	.052	.042	.013
Nose		.535	.054	.067	.052	.025	.004	.535	.027	.044	.052	.042	.013
		.545	.008	.009	.006	.033	.063	.565	.426	.409	.389	.404	.434
		.555	.100	.089	.106	.117	.146	.568	.494	.482	.462	.484	.507
		.565	.380	.379	.383	.393	.422	.587	.125	.168	.094	.103	.127
Main stage		.568	.430	.429	.421	.431	.449	.607	.072	.061	.047	.056	.074
		.577	.167	.154	.152	.162	.174	.627	.055	.038	.030	.039	.057
		.587	.126	.108	.094	.103	.115	.657	.045	.030	.016	.025	.051
		.597	.057	.072	.059	.068	.080	.697	.041	.026	.008	.021	.043
Main stage		.607	.085	.061	.047	.056	.068	.737	.034	.020	.004	.014	.037
		.617	.079	.055	.043	.045	.057	.777	.032	.014	.000	.010	.033
		.627	.074	.049	.038	.039	.045	.817	.023	.009	.004	.005	.028
		.637	.068	.037	.024	.027	.045	.857	.027	.014	.001	.010	.028
Main stage		.657	.060	.034	.022	.023	.039	.897	.031	.018	.003	.013	.033
		.677	.048	.018	.010	.019	.029						
		.697	.037	.016	.006	.016	.025						
		.737	.046	.024	.004	.010	.037						
Main stage		.777	.048	.022	.014	.008	.020						
		.785	.046	.020	.002	.006	.035						
		.817	.041	.015	.009	.005	.030						
		.857	.046	.013	.002	.008	.032						
Main stage		.877	.044	.013	.002	.009	.030						
		.897	.046	.014	.002	.009	.032						
		.917	.054	.029	.021	.014	.036						
		.957	.063	.033	.026	.015	.046						
Main stage		.997	.124	.097	.069	.082	.123						

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

x/l		C_p for $\beta = 0^\circ$						C_p for $\beta = -30^\circ$																
		$\alpha = 0^\circ$						$\alpha = 0^\circ$																
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$										
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.411	.692	.601	.539	.474	.411	.345	.271	.421	.551	.487	.440	.379	.319	.258	.179	
								.421	.597	.514	.447	.387	.319	.254	.183	.431	.463	.400	.345	.291	.236	.182	.115	.003
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.431	.734	.644	.582	.520	.458	.396	.334	.272	.458	.387	.325	.263	.201	.139	.077	.015
								.441	.744	.654	.592	.530	.468	.406	.344	.282	.220	.158	.096	.034	.002	.002	.002	.002
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.453	.754	.664	.602	.540	.478	.416	.354	.292	.478	.407	.345	.283	.221	.159	.097	.035
								.463	.764	.674	.612	.550	.488	.426	.364	.302	.240	.178	.116	.054	.002	.002	.002	.002
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.473	.774	.684	.622	.560	.498	.436	.374	.312	.498	.427	.365	.303	.241	.179	.117	.055
								.483	.784	.694	.632	.570	.508	.446	.384	.322	.260	.198	.136	.074	.012	.012	.012	.012
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.493	.794	.704	.642	.580	.518	.456	.394	.332	.518	.447	.385	.323	.261	.199	.137	.075
								.503	.804	.714	.652	.590	.528	.466	.404	.342	.280	.218	.156	.094	.032	.032	.032	.032
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.513	.814	.724	.662	.600	.538	.476	.414	.352	.538	.467	.405	.343	.281	.219	.157	.095
								.523	.824	.734	.672	.610	.548	.486	.424	.362	.300	.238	.176	.114	.052	.052	.052	.052
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.525	.826	.736	.674	.612	.550	.488	.426	.364	.550	.479	.417	.355	.293	.231	.169	.107
								.535	.836	.746	.684	.622	.560	.498	.436	.374	.312	.250	.188	.126	.064	.064	.064	.064
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.535	.836	.746	.684	.622	.560	.498	.436	.374	.560	.489	.427	.365	.303	.241	.179	.117
								.545	.846	.756	.694	.632	.570	.508	.446	.384	.322	.260	.198	.136	.074	.074	.074	.074
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.555	.846	.756	.694	.632	.570	.508	.446	.384	.570	.499	.437	.375	.313	.251	.189	.127
								.565	.856	.766	.704	.642	.580	.518	.456	.394	.332	.270	.208	.146	.084	.084	.084	.084
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.565	.856	.766	.704	.642	.580	.518	.456	.394	.580	.509	.447	.385	.323	.261	.199	.137
								.575	.866	.776	.714	.652	.590	.528	.466	.404	.342	.280	.218	.156	.094	.094	.094	.094
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.577	.866	.776	.714	.652	.590	.528	.466	.404	.590	.519	.457	.395	.333	.271	.209	.147
								.587	.876	.786	.724	.662	.600	.538	.476	.414	.352	.290	.228	.166	.104	.104	.104	.104
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.587	.876	.786	.724	.662	.600	.538	.476	.414	.600	.529	.467	.405	.343	.281	.219	.157
								.597	.886	.796	.734	.672	.610	.548	.486	.424	.362	.300	.238	.176	.114	.114	.114	.114
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.607	.886	.796	.734	.672	.610	.548	.486	.424	.610	.539	.477	.415	.353	.291	.229	.167
								.617	.896	.806	.744	.682	.620	.558	.496	.434	.372	.310	.248	.186	.124	.124	.124	.124
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.617	.896	.806	.744	.682	.620	.558	.496	.434	.620	.549	.487	.425	.363	.301	.239	.177
								.627	.906	.816	.754	.692	.630	.568	.506	.444	.382	.320	.258	.196	.134	.134	.134	.134
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.627	.906	.816	.754	.692	.630	.568	.506	.444	.630	.559	.497	.435	.373	.311	.249	.187
								.637	.916	.826	.764	.702	.640	.578	.516	.454	.392	.330	.268	.206	.144	.144	.144	.144
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.637	.916	.826	.764	.702	.640	.578	.516	.454	.640	.569	.507	.445	.383	.321	.259	.197
								.647	.926	.836	.774	.712	.650	.588	.526	.464	.402	.340	.278	.216	.154	.154	.154	.154
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.647	.926	.836	.774	.712	.650	.588	.526	.464	.650	.579	.517	.455	.393	.331	.269	.207
								.657	.936	.846	.784	.722	.660	.598	.536	.474	.412	.350	.288	.226	.164	.164	.164	.164
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.657	.936	.846	.784	.722	.660	.598	.536	.474	.660	.589	.527	.465	.403	.341	.279	.217
								.667	.946	.856	.794	.732	.670	.608	.546	.484	.422	.360	.298	.236	.174	.174	.174	.174
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.667	.946	.856	.794	.732	.670	.608	.546	.484	.670	.599	.537	.475	.413	.351	.289	.227
								.677	.956	.866	.804	.742	.680	.618	.556	.494	.432	.370	.308	.246	.184	.184	.184	.184
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.677	.956	.866	.804	.742	.680	.618	.556	.494	.680	.609	.547	.485	.423	.361	.299	.237
								.687	.966	.876	.814	.752	.690	.628	.566	.504	.442	.380	.318	.256	.194	.194	.194	.194
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.687	.966	.876	.814	.752	.690	.628	.566	.504	.690	.619	.557	.495	.433	.371	.309	.247
								.697	.976	.886	.824	.762	.700	.638	.576	.514	.452	.390	.328	.266	.204	.204	.204	.204
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.697	.976	.886	.824	.762	.700	.638	.576	.514	.700	.629	.567	.505	.443	.381	.319	.257
								.707	.986	.896	.834	.772	.710	.648	.586	.524	.462	.400	.338	.276	.214	.214	.214	.214
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.707	.986	.896	.834	.772	.710	.648	.586	.524	.710	.639	.577	.515	.453	.391	.329	.267
								.717	.996	.906	.844	.782	.720	.658	.596	.534	.472	.410	.348	.286	.224	.224	.224	.224
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.717	.996	.906	.844	.782	.720	.658	.596	.534	.720	.649	.587	.525	.463	.401	.339	.277
								.727	.1006	.916	.854	.792	.730	.668	.606	.544	.482	.420	.358	.296	.234	.234	.234	.234
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.727	.1006	.916	.854	.792	.730	.668	.606	.544	.730	.659	.597	.535	.473	.411	.349	.287
								.737	.1016	.926	.864	.802	.740	.678	.616	.554	.492	.430	.368	.306	.244	.244	.244	.244
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.737	.1016	.926	.864	.802	.740	.678	.616	.554	.740	.669	.607	.545	.483	.421	.359	.297
								.747	.1026	.936	.874	.812	.750	.688	.626	.564	.502	.440	.378	.316	.254	.254	.254	.254
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.747	.1026	.936	.874	.812	.750	.688	.626	.564	.750	.679	.617	.555	.493	.431	.369	.307
								.757	.1036	.946	.884	.822	.760	.698	.636	.574	.512	.450	.388	.326	.264	.264	.264	.264
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.757	.1036	.946	.884	.822	.760	.698	.636	.574	.760	.689	.627	.565	.503	.441	.379	.317
								.767	.1046	.956	.894	.832	.770	.708	.646	.584	.522	.460	.398	.336	.274	.274	.274	.274
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.767	.1046	.956	.894	.832	.770	.708	.646	.584	.770	.699	.637	.575	.513	.451	.389	.327
								.777	.1056	.966	.904	.842	.780	.718	.656	.594	.532	.470	.408	.346	.284	.284	.284	.284
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.777	.1056	.966	.904	.842	.780	.718	.656	.594	.780	.709	.647	.585	.523	.461	.399	.337
								.787	.1066	.976	.914	.852	.790	.728	.666	.604	.542	.480	.418	.356	.294	.294	.294	.294
Main stage	Transition	Flare	Upper stage	Upper stage	Transition	Flare	Noise	.787	.1066	.976	.914	.852	.790	.728	.666	.604								

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for - $\beta = -60^\circ$										C_p for - $\beta = -90^\circ$						
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
Nose	.421	.425	.422	.405	.379	.288	.202	Nose	.411	.383	.445	.470	.467	.456	.429	.358
	.431	.342	.335	.318	.288	.201	.126		.431	.212	.266	.284	.284	.270	.250	.198
Upper stage	.441	.224	.213	.196	.170	.094	.027	Upper stage	.441	.106	.148	.170	.170	.156	.140	.096
	.453	-1.301	-1.234	-1.129	-1.007	-.805	-.753		.453	-1.258	-1.203	-1.180	-1.125	-1.115	-1.116	-1.072
Transition	.458	.706	.722	.707	.672	.582	.565	Transition	.473	.235	.222	.228	.255	.265	.278	.249
	.463	.531	.554	.559	.559	.543	.530		.473	-.048	.035	.064	.072	.058	.007	-.054
Plate	.473	.079	.129	.193	.259	.363	.358	Plate	.493	.048	.035	.064	.072	.058	.007	-.054
	.483	-.048	.008	.010	.025	-.149	-.159		.493	.224	.260	.254	.247	.256	.244	.202
Main stage	.493	.007	.058	.080	.072	-.039	-.032	Main stage	.513	.224	.260	.254	.247	.256	.244	.202
	.503	.088	.128	.142	.130	.077	.032		.513	.224	.260	.254	.247	.256	.244	.202
Main stage	.513	.286	.314	.282	.239	.193	.167	Main stage	.535	-.005	.058	.076	.076	.066	.038	-.023
	.525	.108	.147	.157	.146	.077	.012		.535	-.005	.058	.076	.076	.066	.038	-.023
Main stage	.535	.080	.097	.095	.076	.022	-.039	Main stage	.565	-.476	-.436	-.437	-.425	-.439	-.452	-.479
	.545	.026	.039	.029	.006	-.048	-.099		.565	-1.019	-.972	-.800	-.729	-.834	-.968	-.995
Main stage	.555	-.079	-.066	-.072	-.089	-.111	-.188	Main stage	.587	-.190	-.134	-.116	-.116	-.122	-.150	-.188
	.565	.381	.384	.406	.417	.431	.460		.587	-.190	-.134	-.116	-.116	-.122	-.150	-.188
Main stage	.568	.945	.944	.843	.643	.846	.908	Main stage	.607	-.138	-.083	-.057	-.057	-.063	-.095	-.133
	.577	.209	.177	.175	.178	.193	.208		.607	-.138	-.083	-.057	-.057	-.063	-.095	-.133
Main stage	.587	.158	.122	.108	.116	.122	.149	Main stage	.627	-.119	-.059	-.037	-.037	-.043	-.071	-.114
	.597	.123	.091	.073	.076	.083	.118		.627	-.119	-.059	-.037	-.037	-.043	-.071	-.114
Main stage	.607	.103	.071	.053	.057	.063	.094	Main stage	.657	-.103	-.050	-.027	-.022	-.033	-.060	-.099
	.617	.095	.059	.045	.045	.067	.086		.657	-.103	-.050	-.027	-.022	-.033	-.060	-.099
Main stage	.627	.091	.055	.037	.037	.064	.078	Main stage	.697	-.097	-.043	-.019	-.016	-.026	-.053	-.092
	.637	.080	.047	.039	.029	.035	.074		.697	-.097	-.043	-.019	-.016	-.026	-.053	-.092
Main stage	.657	.073	.038	.021	.022	.029	.061	Main stage	.737	-.088	-.036	-.011	-.009	-.018	-.045	-.080
	.677	.061	.030	.016	.017	.024	.053		.737	-.088	-.036	-.011	-.009	-.018	-.045	-.080
Main stage	.697	.048	.021	.010	.012	.039	.046	Main stage	.777	-.082	-.033	-.008	-.007	-.014	-.040	-.073
	.717	.059	.025	.010	.011	.032	.038		.777	-.082	-.033	-.008	-.007	-.014	-.040	-.073
Main stage	.737	.055	.020	.006	.005	.024	.028	Main stage	.785	-.085	-.033	-.008	-.005	-.013	-.039	-.072
	.757	.059	.025	.007	.004	.024	.026		.785	-.085	-.033	-.008	-.005	-.013	-.039	-.072
Main stage	.817	.049	.016	.001	.001	.027	.027	Main stage	.817	-.077	-.023	-.002	.001	-.008	-.033	-.067
	.837	.054	.020	.005	.005	.027	.027		.817	-.077	-.023	-.002	.001	-.008	-.033	-.067
Main stage	.857	.053	.022	.006	.006	.028	.028	Main stage	.857	-.073	-.023	-.006	-.005	-.013	-.039	-.070
	.877	.053	.022	.006	.006	.028	.028		.857	-.073	-.023	-.006	-.005	-.013	-.039	-.070
Main stage	.897	.055	.023	.007	.007	.031	.031	Main stage	.897	-.079	-.033	-.010	-.007	-.016	-.043	-.072
	.917	.061	.029	.013	.012	.033	.031		.897	-.079	-.033	-.010	-.007	-.016	-.043	-.072
Main stage	.937	.067	.036	.019	.020	.043	.043	Main stage	.937	-.067	-.036	-.019	-.020	-.027	-.043	-.072
	.957	.135	.104	.083	.080	.113	.123		.937	-.067	-.036	-.019	-.020	-.027	-.043	-.072

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(c) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 0^\circ$						C_p for $\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	x, z	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	x, z
Main stage		.815	.729	.671	.609	.548	Main stage	.688	.622	.577	.524	.470	Main stage
		.737	.646	.589	.530	.470		.616	.549	.505	.451	.397	
		.641	.552	.502	.445	.387		.501	.441	.395	.356	.306	
		.546	.459	.414	.361	.303		.441	.385	.341	.298	.247	
Transition		.453	.363	.318	.265	.206	Transition	.379	.326	.282	.238	.184	Transition
		.363	.273	.228	.175	.116		.317	.264	.220	.176	.122	
		.273	.183	.138	.085	.026		.255	.202	.158	.114	.060	
		.183	.093	.048	-.005	-.056		.191	.138	.094	.050	.006	
Nose		.093	.003	-.042	-.095	-.156	Nose	.129	.076	.032	-.012	-.058	Nose
		.003	-.087	-.138	-.191	-.244		.068	.015	-.029	-.075	-.122	
		-.087	-.177	-.228	-.279	-.330		.007	-.046	-.092	-.138	-.184	
		-.177	-.267	-.318	-.369	-.420		-.054	-.101	-.147	-.193	-.239	

TABLE 22.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -9^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Note	x/l							
Main stage	.421	-.570	-.565	-.550	-.524	-.488	-.437	-.352
	.431	-.561	-.547	-.532	-.506	-.470	-.419	-.334
	.441	-.547	-.532	-.517	-.491	-.455	-.404	-.319
	.451	-.533	-.518	-.503	-.477	-.441	-.390	-.305
	.459	-.520	-.505	-.490	-.464	-.428	-.377	-.292
	.463	-.506	-.491	-.476	-.450	-.414	-.363	-.278
	.473	-.492	-.477	-.462	-.436	-.400	-.349	-.264
	.483	-.478	-.463	-.448	-.422	-.386	-.335	-.250
	.493	-.464	-.449	-.434	-.408	-.372	-.321	-.236
	.503	-.450	-.435	-.420	-.394	-.358	-.307	-.222
Transition flap	.513	-.436	-.421	-.406	-.380	-.344	-.293	-.208
	.525	-.422	-.407	-.392	-.366	-.330	-.279	-.194
	.535	-.408	-.393	-.378	-.352	-.316	-.265	-.180
	.545	-.394	-.379	-.364	-.338	-.302	-.251	-.166
	.555	-.380	-.365	-.350	-.324	-.288	-.237	-.152
	.565	-.366	-.351	-.336	-.310	-.274	-.223	-.138
	.568	-.352	-.337	-.322	-.296	-.260	-.209	-.124
	.577	-.338	-.323	-.308	-.282	-.246	-.195	-.110
	.587	-.324	-.309	-.294	-.268	-.232	-.181	-.96
	.597	-.310	-.295	-.280	-.254	-.218	-.167	-.82
Main stage	.607	-.296	-.281	-.266	-.240	-.204	-.153	-.68
	.617	-.282	-.267	-.252	-.226	-.190	-.139	-.54
	.627	-.268	-.253	-.238	-.212	-.176	-.125	-.40
	.637	-.254	-.239	-.224	-.198	-.162	-.111	-.26
	.647	-.240	-.225	-.210	-.184	-.148	-.097	-.12
	.657	-.226	-.211	-.196	-.170	-.134	-.083	-.08
	.667	-.212	-.197	-.182	-.156	-.120	-.069	-.04
	.677	-.198	-.183	-.168	-.142	-.106	-.055	-.02
	.687	-.184	-.169	-.154	-.128	-.092	-.041	-.02
	.697	-.170	-.155	-.140	-.114	-.078	-.027	-.02

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

C_p for -											
$\beta = 0^\circ$											
$x/2$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	$x/2$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$
Nose	.411	.896	.802	.672	.614	.558	.421	.785	.721	.615	.565
	.421	.833	.745	.621	.562	.504	.431	.730	.670	.572	.510
	.431	.763	.682	.568	.511	.457	.441	.659	.592	.510	.469
	.441	.694	.619	.516	.460	.410	.453	.592	.529	.460	.418
Stage	.453	.624	.549	.446	.390	.336	.453	.549	.483	.424	.374
	.463	.558	.470	.367	.310	.256	.458	.526	.479	.424	.374
	.473	.493	.409	.306	.249	.195	.463	.516	.479	.424	.374
	.483	.414	.330	.227	.170	.116	.473	.516	.479	.424	.374
Upper stage	.493	.345	.261	.158	.101	.047	.483	.516	.479	.424	.374
	.503	.276	.192	.089	.032	-.022	.493	.516	.479	.424	.374
	.513	.207	.123	.020	-.037	-.093	.503	.516	.479	.424	.374
		.138	.054	-.049	-.106	-.163	.513	.516	.479	.424	.374
Transition	.523	.383	.299	.215	.131	.047	.523	.516	.479	.424	.374
	.533	.314	.230	.146	.062	-.022	.533	.516	.479	.424	.374
	.543	.245	.161	.077	-.007	-.089	.543	.516	.479	.424	.374
	.553	.176	.092	.008	-.062	-.126	.553	.516	.479	.424	.374
Main stage	.563	.107	.023	-.062	-.126	-.183	.563	.516	.479	.424	.374
	.573	.038	-.046	-.126	-.183	-.240	.573	.516	.479	.424	.374
	.583	-.031	-.109	-.166	-.223	-.280	.583	.516	.479	.424	.374
	.593	-.102	-.175	-.232	-.289	-.346	.593	.516	.479	.424	.374

TABLE 6.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for -										C_p for -									
$\beta = -55^\circ$										$\beta = -30^\circ$									
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$			x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nozzle																			
Upper stage																			
Transition Plate																			
Main stage																			

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

		C_p for -					
		$\phi = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
x/l							
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
	Nose	.426	.475	.554	.575	.629	.694
		.436	.475	.554	.575	.629	.694
		.446	.475	.554	.575	.629	.694
		.453	.475	.554	.575	.629	.694
	Upper stage	.456	.475	.554	.575	.629	.694
		.463	.475	.554	.575	.629	.694
		.473	.475	.554	.575	.629	.694
		.483	.475	.554	.575	.629	.694
	Upper stage	.493	.475	.554	.575	.629	.694
		.503	.475	.554	.575	.629	.694
		.513	.475	.554	.575	.629	.694
		.525	.475	.554	.575	.629	.694
	Transition	.535	.475	.554	.575	.629	.694
		.545	.475	.554	.575	.629	.694
		.555	.475	.554	.575	.629	.694
		.565	.475	.554	.575	.629	.694
	Main stage	.568	.475	.554	.575	.629	.694
		.577	.475	.554	.575	.629	.694
		.587	.475	.554	.575	.629	.694
		.597	.475	.554	.575	.629	.694
		.607	.475	.554	.575	.629	.694
		.617	.475	.554	.575	.629	.694
		.627	.475	.554	.575	.629	.694
		.637	.475	.554	.575	.629	.694
		.647	.475	.554	.575	.629	.694
		.657	.475	.554	.575	.629	.694
		.667	.475	.554	.575	.629	.694
		.677	.475	.554	.575	.629	.694
		.687	.475	.554	.575	.629	.694
		.697	.475	.554	.575	.629	.694
		.707	.475	.554	.575	.629	.694
		.717	.475	.554	.575	.629	.694
		.727	.475	.554	.575	.629	.694
		.737	.475	.554	.575	.629	.694
		.747	.475	.554	.575	.629	.694
		.757	.475	.554	.575	.629	.694
		.767	.475	.554	.575	.629	.694
		.777	.475	.554	.575	.629	.694
		.787	.475	.554	.575	.629	.694
		.797	.475	.554	.575	.629	.694
		.807	.475	.554	.575	.629	.694
		.817	.475	.554	.575	.629	.694
		.827	.475	.554	.575	.629	.694
		.837	.475	.554	.575	.629	.694
		.847	.475	.554	.575	.629	.694
		.857	.475	.554	.575	.629	.694
		.867	.475	.554	.575	.629	.694
		.877	.475	.554	.575	.629	.694
		.887	.475	.554	.575	.629	.694
		.897	.475	.554	.575	.629	.694
		.907	.475	.554	.575	.629	.694
		.917	.475	.554	.575	.629	.694
		.927	.475	.554	.575	.629	.694
		.937	.475	.554	.575	.629	.694
		.947	.475	.554	.575	.629	.694
		.957	.475	.554	.575	.629	.694
		.967	.475	.554	.575	.629	.694
		.977	.475	.554	.575	.629	.694
		.987	.475	.554	.575	.629	.694
		.997	.475	.554	.575	.629	.694

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 222 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

x/l		C_p for -				
		$\phi = -60^\circ$				
		$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage		.426	.475	.549	.571	.622
		.436	.393	.416	.478	.512
		.446	.407	.421	.496	.534
		.453	.417	.433	.503	.544
Transition		.458	.422	.437	.503	.544
		.463	.427	.442	.508	.549
		.473	.437	.452	.513	.554
		.483	.447	.462	.523	.564
Upper stage		.488	.452	.467	.533	.574
		.493	.457	.472	.538	.579
		.503	.467	.482	.548	.589
		.513	.477	.492	.558	.599
Flare		.525	.489	.504	.569	.610
		.535	.499	.514	.579	.620
		.545	.509	.524	.589	.630
		.555	.519	.534	.599	.640
Nose		.565	.529	.544	.609	.650
		.568	.532	.547	.612	.653
		.577	.541	.556	.621	.662
		.587	.551	.566	.631	.672
		.597	.561	.576	.641	.682
		.607	.571	.586	.651	.692
		.617	.581	.596	.661	.702
		.627	.591	.606	.671	.712
		.637	.601	.616	.681	.722
		.647	.611	.626	.691	.732
		.657	.621	.636	.701	.742
		.667	.631	.646	.711	.752
		.677	.641	.656	.721	.762
		.687	.651	.666	.731	.772
		.697	.661	.676	.741	.782
		.707	.671	.686	.751	.792
		.717	.681	.696	.761	.802
		.727	.691	.706	.771	.812
		.737	.701	.716	.781	.822
		.747	.711	.726	.791	.832
		.757	.721	.736	.801	.842
		.767	.731	.746	.811	.852
		.777	.741	.756	.821	.862
		.787	.751	.766	.831	.872
		.797	.761	.776	.841	.882
		.807	.771	.786	.851	.892
		.817	.781	.796	.861	.902
		.827	.791	.806	.871	.912
		.837	.801	.816	.881	.922
		.847	.811	.826	.891	.932
		.857	.821	.836	.901	.942
		.867	.831	.846	.911	.952
		.877	.841	.856	.921	.962
		.887	.851	.866	.931	.972
		.897	.861	.876	.941	.982
		.907	.871	.886	.951	.992
		.917	.881	.896	.961	.997
		.927	.891	.906	.971	.997
		.937	.901	.916	.981	.997
		.947	.911	.926	.991	.997

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

x/l		C_p for - $\beta = 0^\circ$						C_p for - $\beta = -30^\circ$									
		$\alpha = 0^\circ$						$\alpha = 0^\circ$									
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nose		.426	.728	.648	.590	.522	.457	.384	.281	.426	.688	.620	.573	.527	.462	.390	.287
		.436	.576	.479	.427	.369	.293	.238	.140	.436	.497	.419	.376	.333	.274	.221	.132
Upper stage		.446	.333	.236	.184	.127	.068	-.035	.446	.305	.219	.179	.138	.085	.052	-.024	-.525
		.453	-1.558	-1.489	-1.344	-1.258	-1.115	-.677	.453	-1.388	-1.290	-1.169	-1.007	-.747	-.583	-.525	-.549
Transition		.463	-.351	-.555	-.810	-.846	-.768	-.578	.463	-.519	-.722	-.458	-.334	-.710	-.594	-.549	-.595
		.463	-.115	-.179	-.262	-.419	-.485	-.623	.463	-.149	-.324	-.458	-.551	-.670	-.611	-.595	-.595
Main stage		.473	-.011	-.041	-.048	-.072	-.144	-.247	.473	-.034	-.041	-.054	-.084	-.179	-.322	-.404	-.404
		.483	.041	.C11	.004	-.003	-.011	.127	.483	.018	.011	.016	.016	.049	.064	.024	-.018
Flare		.493	.093	.C63	.056	.043	.052	.024	.493	.064	.051	.056	.049	.064	.024	-.018	-.018
		.503	.162	.132	.119	.107	.098	.070	.503	.145	.132	.125	.112	.110	.076	.040	.040
Transition		.513	.369	.316	.286	.245	.196	.145	.513	.346	.304	.280	.233	.202	.139	.109	.109
		.525	.230	.178	.147	.118	.086	.058	.525	.179	.155	.142	.118	.086	.058	.017	.017
Main stage		.535	.156	.C97	.073	.049	.017	-.024	.535	.133	.051	.073	.049	.017	.001	-.035	-.035
		.545	.110	.C46	.033	.003	-.029	-.071	.545	.075	.028	.004	-.014	-.035	-.057	-.094	-.094
Flare		.555	.035	-.023	-.060	-.085	-.111	-.122	.555	-.016	-.059	-.078	-.091	-.117	-.145	-.182	-.182
		.565	-.269	-.328	-.342	-.343	-.328	-.299	.565	-.321	-.370	-.377	-.360	-.351	-.333	-.387	-.387
Transition		.577	-.053	-.501	-.520	-.492	-.454	-.407	.577	-.471	-.507	-.514	-.480	-.454	-.413	-.466	-.466
		.587	-.098	-.146	-.159	-.160	-.169	-.158	.587	-.127	-.146	-.159	-.160	-.169	-.156	-.169	-.169
Main stage		.597	-.028	-.C64	-.077	-.073	-.087	-.080	.597	-.075	-.099	-.106	-.102	-.116	-.110	-.117	-.117
		.607	-.016	-.047	-.060	-.055	-.070	-.063	.607	-.046	-.064	-.071	-.067	-.075	-.075	-.076	-.076
Flare		.617	-.005	-.C41	-.054	-.049	-.058	-.051	.617	-.034	-.053	-.066	-.055	-.070	-.063	-.070	-.070
		.627	-.005	-.C35	-.042	-.038	-.046	-.040	.627	-.022	-.041	-.054	-.049	-.058	-.051	-.064	-.064
Main stage		.637	.006	-.C23	-.037	-.032	-.040	-.034	.637	-.016	-.035	-.037	-.032	-.040	-.034	-.047	-.047
		.647	.013	-.C14	-.015	-.016	-.021	-.020	.647	-.016	.027	.019	.018	-.025	-.022	-.041	-.041
Transition		.657	.013	-.C14	-.011	-.014	-.019	-.018	.657	-.016	.027	.019	.018	-.025	-.022	-.041	-.041
		.667	.017	-.C10	-.011	-.008	-.013	-.012	.667	-.005	.016	.009	.008	-.015	-.018	-.029	-.029
Main stage		.677	.017	-.C08	-.011	-.007	-.011	-.012	.677	-.009	.020	.011	.010	-.017	-.018	-.037	-.037
		.737	.021	-.C04	-.011	-.005	-.009	-.009	.737	-.007	.016	.015	.007	-.013	-.014	-.037	-.037
Transition		.777	.021	-.C04	-.011	-.005	-.009	-.022	.777	-.003	.010	.005	.012	.013	.011	-.035	-.035
		.785	.026	.C00	-.002	-.003	-.009	-.005	.785	-.001	.012	.013	.005	-.005	-.009	-.033	-.033
Main stage		.817	.029	.C08	-.000	.000	.004	.004	.817	-.002	.004	.003	.000	.004	.008	-.034	-.034
		.857	.022	.C01	-.004	-.003	-.007	-.007	.857	-.004	.009	.008	.004	.008	.008	-.012	-.012
Transition		.877	.025	-.C02	-.003	-.002	-.007	-.008	.877	-.006	.011	.010	.005	-.008	.013	-.038	-.038
		.897	.021	-.C02	-.007	-.005	-.010	-.011	.897	-.022	.014	.012	.007	-.012	.017	-.041	-.041
Main stage									.917	-.007	.014	.012	.007	-.012	.017	-.041	-.041
									.957	-.022	.025	.021	.018	-.024	.030	-.051	-.051
Transition									.997	-.106	-.089	-.077	-.070	-.080	-.095	-.128	-.128

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION #22 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for $\beta = -60^\circ$													C_p for $\beta = -90^\circ$					
x/z	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Main stage	Flare							Transition							Noose			
	.559	.558	.545	.522	.479	.424	.320	.426	.418	.479	.511	.516	.508	.486				
	.436	.405	.387	.358	.321	.283	.191	.446	.074	.107	.122	.138	.141	.125				
	.446	.415	.397	.368	.330	.292	.200	.453	-1.149	-1.133	-1.105	-1.001	-0.765	-0.934				
Main stage	Flare							Transition							Noose			
	.569	.568	.555	.532	.489	.434	.340	.473	.172	.127	.135	.118	.219	.185				
	.453	.422	.404	.375	.337	.300	.208	.493	.063	.005	.061	.069	.030	.070				
	.463	.432	.414	.385	.347	.310	.218	.513	.224	.246	.239	.236	.243	.166				
Main stage	Flare							Transition							Noose			
	.579	.578	.565	.542	.499	.444	.350	.568	.480	.416	.389	.366	.375	.415				
	.467	.436	.418	.389	.351	.314	.222	.587	.547	.490	.468	.440	.454	.494				
	.477	.446	.428	.399	.361	.324	.232	.607	.133	.088	.071	.055	.070	.166				
Main stage	Flare							Transition							Noose			
	.589	.588	.575	.552	.509	.454	.360	.627	.116	.070	.054	.038	.052	.128				
	.477	.446	.428	.399	.361	.324	.232	.657	.108	.058	.023	.018	.031	.109				
	.487	.456	.438	.409	.371	.334	.242	.697	.100	.053	.021	.012	.023	.105				
Main stage	Flare							Transition							Noose			
	.599	.598	.585	.562	.519	.464	.370	.737	.094	.047	.013	.008	.017	.098				
	.487	.456	.438	.409	.371	.334	.242	.777	.088	.043	.011	.008	.038	.105				
	.507	.476	.458	.429	.391	.354	.262	.817	.082	.037	.009	.003	.013	.094				
Main stage	Flare							Transition							Noose			
	.609	.608	.595	.572	.529	.474	.380	.857	.079	.032	.002	.002	.007	.088				
	.497	.466	.448	.419	.381	.344	.252	.897	.083	.037	.013	.002	.011	.084				
	.517	.486	.468	.439	.401	.364	.272	.937	.085	.039	.016	.005	.014	.086				

(b) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

		C_p for -					
		$\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 10^\circ$
Main stage	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Transition	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Flare	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Mose	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468

		C_p for -					
		$\beta = 0^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 10^\circ$
Main stage	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Transition	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Flare	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468
Mose	x/l	.426	.436	.446	.453	.458	.463
		.436	.446	.453	.458	.463	.468

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for - $\beta = -60^\circ$										C_p for - $\beta = -50^\circ$					
x/z	$\alpha = -60^\circ$						$\alpha = -50^\circ$								
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Main stage	.426	.649	.629	.598	.555	.401	.507		.592	.594	.589		.498		
	.436	.507	.475	.444	.408	.273	.446		.253	.256	.250		.190		
Transition	.545	.311	.283	.252	.228	.104	.453		.804	.768	.675		.753		
	.555	.083	.076	.065	.057	.045	.565		.632	.539	.365		.471		
Flare	.565	.458	.426	.382	.334	.176	.587		.111	.108	.110		.184		
	.568	.384	.362	.347	.325	.145	.607		.057	.054	.056		.134		
Rose	.577	.302	.266	.226	.187	.099	.627		.037	.034	.037		.118		
	.587	.152	.107	.104	.110	.145	.657		.024	.021	.025		.102		
Main stage	.607	.098	.072	.069	.075	.114	.697		.018	.008	.021		.094		
	.617	.045	.042	.044	.044	.087	.737		.011	.011	.012		.083		
Transition	.627	.037	.038	.037	.037	.079	.777		.008	.003	.008		.076		
	.637	.026	.027	.027	.033	.072	.817		.009	.009	.007		.074		
Flare	.657	.022	.016	.016	.022	.063	.857		.006	.006	.002		.058		
	.677	.016	.012	.012	.018	.057	.897		.008	.008	.007		.073		
Rose	.697	.043	.010	.007	.015	.051	.937		.011	.011	.010		.075		
	.737	.055	.010	.003	.011	.042	.977		.008	.008	.007		.075		
Main stage	.777	.051	.005	.001	.007	.034	.997		.006	.006	.007		.075		
	.785	.055	.006	.001	.004	.032			.006	.006	.007		.075		
Transition	.817	.047	.001	.004	.002	.029			.006	.006	.007		.075		
	.837	.052	.006	.001	.006	.031			.006	.006	.007		.075		
Flare	.877	.052	.007	.001	.007	.031			.006	.006	.007		.075		
	.897	.053	.008	.001	.008	.034			.006	.006	.007		.075		
Rose	.917	.059	.013	.007	.014	.036			.006	.006	.007		.075		
	.957	.068	.020	.015	.021	.047			.006	.006	.007		.075		
Main stage	.997	.137	.086	.077	.084	.127			.006	.006	.007		.075		
									.006	.006	.007		.075		

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

C_p for $\theta = 0^\circ$										C_p for $\theta = -30^\circ$									
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l			$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
Nozzle	x/l	.944	.866	.801	.736	.674	.605	.516		Nozzle	x/l	.905	.851	.792	.739	.677	.617	.522	
		.813	.735	.670	.607	.546	.480	.396				.754	.727	.646	.595	.541	.487	.396	
Upper stage	x/l	.639	.568	.506	.455	.399	.342	.268		Upper stage	x/l	.603	.547	.500	.452	.405	.357	.266	
		.604	.548	.488	.435	.389	.342	.268				.547	.491	.452	.405	.357	.266		
Transition	x/l	.804	.741	.681	.628	.574	.520	.464		Transition	x/l	.872	.816	.769	.713	.666	.619	.522	
		.817	.753	.693	.639	.584	.529	.472				.816	.760	.713	.666	.619	.522		
Main stage	x/l	.606	.544	.484	.428	.374	.319	.264		Main stage	x/l	.657	.601	.545	.489	.432	.375	.278	
		.619	.557	.497	.441	.386	.331	.275				.601	.545	.489	.432	.375	.278		
Main stage	x/l	.473	.430	.384	.334	.284	.231	.176		Main stage	x/l	.493	.448	.402	.356	.310	.263	.166	
		.483	.440	.394	.344	.294	.241	.186				.448	.402	.356	.310	.263	.166		
Transition	x/l	.110	.093	.075	.057	.039	.021	.003		Transition	x/l	.150	.128	.106	.084	.062	.040	.018	
		.125	.107	.089	.071	.053	.035	.017				.128	.106	.084	.062	.040	.018		
Upper stage	x/l	.451	.393	.321	.244	.166	.089	.012		Upper stage	x/l	.307	.261	.213	.165	.117	.069	.021	
		.368	.310	.244	.166	.089	.012	.012				.368	.310	.244	.165	.117	.069	.021	
Transition	x/l	.292	.267	.231	.192	.152	.112	.072		Transition	x/l	.256	.220	.184	.148	.112	.076	.040	
		.268	.231	.192	.152	.112	.072	.032				.220	.184	.148	.112	.076	.040		
Flare	x/l	.218	.191	.165	.132	.098	.064	.030		Flare	x/l	.213	.185	.157	.129	.101	.073	.045	
		.218	.191	.165	.132	.098	.064	.030				.185	.157	.129	.101	.073	.045		
Nozzle	x/l	.018	.016	.014	.012	.010	.008	.006		Nozzle	x/l	.018	.016	.014	.012	.010	.008	.006	
		.018	.016	.014	.012	.010	.008	.006				.018	.016	.014	.012	.010	.008	.006	
Upper stage	x/l	.518	.468	.418	.368	.318	.268	.218		Upper stage	x/l	.577	.521	.465	.409	.353	.297	.241	
		.518	.468	.418	.368	.318	.268	.218				.521	.465	.409	.353	.297	.241		
Lower stage	x/l	.352	.321	.289	.255	.221	.187	.153		Lower stage	x/l	.366	.330	.294	.258	.222	.186	.150	
		.352	.321	.289	.255	.221	.187	.153				.330	.294	.258	.222	.186	.150		
Nozzle	x/l	.194	.170	.146	.121	.096	.071	.046		Nozzle	x/l	.194	.170	.146	.121	.096	.071	.046	
		.194	.170	.146	.121	.096	.071	.046				.170	.146	.121	.096	.071	.046		
Transition	x/l	.133	.119	.105	.091	.077	.063	.049		Transition	x/l	.133	.119	.105	.091	.077	.063	.049	
		.133	.119	.105	.091	.077	.063	.049				.119	.105	.091	.077	.063	.049		
Flare	x/l	.094	.085	.075	.065	.055	.045	.035		Flare	x/l	.094	.085	.075	.065	.055	.045	.035	
		.094	.085	.075	.065	.055	.045	.035				.085	.075	.065	.055	.045	.035		
Nozzle	x/l	.036	.034	.032	.030	.028	.026	.024		Nozzle	x/l	.036	.034	.032	.030	.028	.026	.024	
		.036	.034	.032	.030	.028	.026	.024				.034	.032	.030	.028	.026	.024		
Upper stage	x/l	.029	.027	.025	.023	.021	.019	.017		Upper stage	x/l	.029	.027	.025	.023	.021	.019	.017	
		.029	.027	.025	.023	.021	.019	.017				.027	.025	.023	.021	.019	.017		
Lower stage	x/l	.003	.002	.001	.000	.000	.000	.000		Lower stage	x/l	.003	.002	.001	.000	.000	.000	.000	
		.003	.002	.001	.000	.000	.000	.000				.002	.001	.000	.000	.000	.000		

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for - $\beta = -60^\circ$										C_p for - $\beta = -90^\circ$									
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Nose	.426	.789	.786	.769	.736	.698	.647	.552	.426	.651	.714	.733	.725	.701	.641				
	.436	.663	.657	.631	.604	.564	.519	.435	.446	.394	.439	.449	.438	.426	.378				
	.446	.508	.502	.476	.449	.414	.378	.304	.453	.394	.439	.449	.438	.426	.378				
	.453	.854	.860	.878	.890	.892	.899	.842	.453	.984	.978	.989	.984	.985	.981				
Main stage	.458	.945	.979	-1.008	-1.018	-1.032	-1.008	.628											
	.463	.719	.871	.908	.937	.937	.837	.604	.473	.514	.633	.669	.674	.598	.524				
	.473	.352	.623	.669	.692	.692	.528	.561	.493	.333	.205	.149	.142	.212	.334				
	.483	.269	.407	.464	.507	.507	.381	.484											
Transition flare	.493	.239	.272	.253	.297	.169	.255	.383											
	.503	.006	.097	.108	.092	.062	.118	.270	.513	.107	.219	.202	.161	.172	.104				
	.503	.283	.311	.266	.184	.091	.020	.120											
	.525	.152	.249	.293	.296	.245	.145	.063	.535	.021	.167	.223	.215	.148	.011				
Main stage	.525	.137	.210	.232	.244	.206	.120	.026											
	.535	.119	.173	.183	.183	.154	.087	.029											
	.545	.078	.123	.130	.110	.093	.036	.062	.565	.199	.118	.105	.110	.129	.187				
	.565	.093	.065	.077	.108	.125	.154	.218	.568	.642	.593	.579	.578	.591	.637				
Nose	.568	.574	.553	.552	.564	.578	.603	.652											
	.577	.487	.475	.474	.465	.489	.538	.606	.587	.472	.426	.405	.414	.440	.488				
	.587	.386	.377	.382	.385	.371	.433	.526	.607	.379	.281	.249	.235	.270	.390				
	.597	.321	.306	.311	.311	.291	.291	.328	.627	.222	.170	.150	.152	.165	.226				
Main stage	.607	.296	.269	.258	.249	.232	.220	.223											
	.617	.284	.232	.203	.194	.186	.180	.189	.657	.184	.121	.095	.096	.127	.186				
	.627	.275	.185	.163	.157	.152	.153	.174											
	.637	.200	.148	.129	.119	.121	.134	.164	.697	.150	.093	.070	.069	.096	.149				
Nose	.657	.161	.114	.093	.085	.090	.107	.138	.737	.121	.077	.059	.056	.078	.107				
	.677	.134	.094	.078	.060	.065	.080	.097	.777	.051	.015	.009	.012	.006	.052				
	.697	.107	.074	.063	.054	.050	.056	.044	.785	.009	.009	.018	.020	.004	.042				
	.737	.104	.071	.060	.054	.050	.056	.044	.817	.035	.012	.030	.030	.010	.037				
Main stage	.777	.027	.012	.010	.012	.017	.006	.014	.857	.044	.001	.021	.021	.002	.049				
	.785	.033	.002	.022	.025	.023	.003	.010	.897	.049	.003	.014	.013	.008	.055				
	.817	.013	.020	.033	.034	.030	.017	.007											
	.857	.022	.009	.023	.028	.022	.011	.010											
Nose	.877	.023	.009	.021	.025	.020	.009	.011											
	.877	.024	.006	.017	.022	.017	.005	.014											
	.917	.034	.001	.009	.014	.010	.001	.018											
	.957	.035	.006	.001	.004	.001	.013	.029											
Main stage	.997	.103	.086	.093	.102	.115	.134	.155											

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Continued

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$									
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$			
Nose		1.071	.988	.927	.867	.808	.742	.648		1.028	.970	.919	.867	.810	.747	.654			
		.949	.869	.810	.756	.694	.633	.545		.898	.840	.793	.745	.696	.641	.553			
		.800	.729	.675	.628	.577	.524	.449		.768	.710	.667	.623	.582	.534	.452			
		.649	.577	.510	.449	.388	.324	.264		.600	.558	.517	.475	.434	.393	.311			
Upper stage		.490	.419	.352	.289	.226	.163	.103		.554	.513	.472	.431	.390	.349	.267			
		.331	.260	.193	.130	.067	.004	.044		.509	.468	.427	.386	.345	.304	.222			
		.172	.101	.034	.000	.034	.067	.100		.488	.447	.406	.365	.324	.283	.201			
		.013	.046	.079	.112	.145	.178	.211		.468	.427	.386	.345	.304	.263	.181			
Transition flare		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
Main stage		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			
		.000	.033	.066	.099	.132	.165	.198		.447	.406	.365	.324	.283	.242	.160			

TABLE 7.- PRESSURE COEFFICIENTS FOR CONFIGURATION 322 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

x/z		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -90^\circ$						
		$\alpha = -60^\circ$							$\alpha = -90^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Nose		.914	.911	.895	.864	.834	.782	.685	.426	.776	.837	.858	.864	.858	.773
		.800	.795	.779	.748	.715	.670	.584	.446	.564	.604	.619	.623	.617	.547
		.725	.715	.699	.668	.636	.596	.510	.453	.619	.612	.614	.611	.599	.608
		.556	.566	.575	.581	.582	.591	.608							
Upper stage		.612	.630	.642	.653	.660	.669	.691	.473	.376	.394	.406	.412	.405	.395
		.447	.505	.542	.575	.595	.618	.642	.493	.262	.226	.218	.219	.220	.264
		.264	.323	.365	.404	.427	.454	.479							
		.186	.226	.265	.301	.329	.354	.381	.513	.115	.189	.218	.222	.213	.116
Upper stage		.159	.174	.197	.217	.237	.269	.299	.493	.262	.226	.218	.219	.220	.264
		.145	.139	.140	.146	.136	.136	.106							
		.221	.221	.234	.225	.197	.160	.087							
		.180	.221	.234	.225	.197	.160	.087							
Transition Flare		.204	.261	.282	.289	.264	.211	.111	.535	.112	.202	.244	.257	.245	.103
		.202	.246	.253	.254	.240	.190	.084							
		.180	.210	.223	.222	.204	.165	.081							
		.173	.208	.225	.219	.198	.167	.106	.565	.023	.073	.088	.090	.089	.019
Transition Flare		.265	.265	.265	.265	.265	.265	.265	.568	.335	.299	.281	.279	.282	.335
		.278	.263	.259	.259	.277	.299	.338							
		.248	.241	.229	.229	.241	.272	.327	.587	.256	.217	.193	.183	.195	.277
		.198	.189	.182	.186	.198	.236	.294	.607	.220	.159	.138	.128	.137	.231
Main stage		.163	.151	.152	.147	.159	.189	.258	.627	.212	.118	.100	.093	.096	.209
		.149	.132	.127	.125	.137	.156	.209							
		.146	.121	.105	.106	.115	.132	.168	.657	.148	.077	.048	.040	.047	.142
		.146	.107	.094	.093	.099	.118	.146	.697	.142	.078	.046	.034	.048	.137
Main stage		.130	.088	.078	.076	.077	.066	.121	.737	.115	.063	.038	.031	.032	.116
		.121	.061	.051	.037	.043	.037	.089	.777	.082	.048	.027	.018	.024	.098
		.107	.059	.043	.036	.042	.037	.079	.785	.093	.051	.028	.010	.022	.102
		.093	.057	.036	.034	.041	.048	.062	.817	.081	.029	.013	.011	.016	.091
Main stage		.096	.052	.032	.030	.030	.036	.050	.857	.087	.030	.017	.009	.027	.089
		.056	.040	.019	.017	.016	.029	.049	.897	.087	.041	.017	.006	.006	.078
		.057	.037	.015	.013	.020	.031	.049							
		.043	.029	.008	.003	.004	.023	.045							
Main stage		.043	.029	.010	.000	.002	.017	.035	.897	.087	.041	.017	.006	.006	.078
		.073	.032	.018	.007	.008	.021	.031							
		.070	.036	.016	.014	.018	.009	.034							
		.066	.046	.042	.034	.067	.089	.106							

6. $M = 0.45$ to 0.95 $\alpha = 0^\circ$ - Continued

		C_p for -					
		$\beta = -20^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
None	x/l	.406 .410	.257 -1.103	.283 .131	.246 .227	.318 .378	.337 .446
		.430 .450	.147 .047	.162 .064	.178 .040	.199 .111	.225 .142
Upper stage	x/l	.465 .471	-.202 -1.239	-.198 -1.239	-.167 -1.228	-.078 -.928	-.039 -1.660
		.491	-.019	-.017	-.015	-.001	-.156
Transition	x/l	.511	.083	.098	.107	.140	.070
		.531	.355	.383	.393	.425	.312
Main stage	x/l	.552	.026	.024	.040	.102	.219
		.568	-.702	-1.103	-1.251	-1.133	-.843
	x/l	.587	-.088	-.119	-.124	-.078	-.513
		.607	-.031	-.054	-.057	-.045	-.354
	x/l	.627	-.019	-.031	-.036	-.034	-.089
		.657	-.008	-.016	-.015	-.018	.025
	x/l	.697	.003	-.007	-.006	-.011	.015
		.737	.007	-.002	-.001	-.005	.003
	x/l	.777	.011	.001	.002	.000	.000
		.815	.014	-.004	.002	.000	-.001
	x/l	.857	.014	.006	.007	.003	-.001
		.897	.008	-.002	.000	-.005	-.010
	x/l	.937	.008	-.002	.000	-.005	-.011
		.977	.008	-.002	.000	-.005	-.011

TABLE 8.- PRESSURE COEFFICIENTS FOR CONFIGURATION 125 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

x/l		C_p for - $\beta = 0^\circ$							C_p for - $\beta = -30^\circ$							
		$\alpha = 0^\circ$							$\alpha = 0^\circ$							
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
Nose	.410	.392	.334	.275	.226	.188	.131	.087	.410	.364	.317	.270	.221	.183	.131	.070
	.420	.364	.306	.242	.193	.149	.098	.053	.420	.320	.278	.225	.187	.143	.098	.036
	.430	.320	.261	.208	.154	.115	.064	.020	.430	.292	.250	.197	.154	.110	.058	.003
	.450	.219	.161	.107	.058	.020	.032	.072	.450	.185	.144	.090	.053	.015	.032	.000
	.460	.107	.049	.005	.055	.028	.136	.171	.460	.073	.037	.010	.055	.089	.142	.090
Main stage	.465	.022	.089	.150	.194	.228	.270	.292	.465	.057	.100	.155	.194	.228	.275	.315
	.471	.075	.136	.209	.262	.323	.386	.436	.471	.073	.100	.155	.194	.228	.275	.315
	.476	.172	.203	.247	.282	.323	.366	.406	.476	.201	.221	.258	.288	.323	.366	.406
	.481	.068	.088	.120	.130	.135	.147	.159	.481	.080	.088	.114	.118	.117	.130	.129
	.491	.013	.002	.028	.032	.031	.038	.020	.491	.011	.008	.034	.032	.031	.043	.037
Upper stage	.501	.064	.050	.030	.026	.027	.020	.038	.501	.041	.044	.024	.026	.027	.020	.072
	.511	.116	.108	.088	.084	.084	.078	.084	.511	.093	.102	.082	.084	.084	.072	.141
	.521	.214	.200	.180	.176	.171	.158	.153	.521	.191	.200	.180	.176	.171	.158	.141
	.531	.485	.442	.399	.354	.321	.291	.268	.531	.456	.436	.393	.360	.338	.308	.262
	.539	.337	.289	.246	.213	.186	.156	.134	.539	.177	.220	.229	.213	.192	.151	.094
Transition Flare	.546	.246	.192	.149	.111	.083	.048	.026	.546	.052	.078	.069	.065	.038	.003	.061
	.552	.155	.101	.047	.008	.019	.055	.073	.552	.126	.089	.047	.008	.019	.055	.078
	.562	.092	.153	.208	.247	.275	.312	.311	.562	.127	.171	.214	.247	.275	.312	.334
	.568	.699	.765	.826	.830	.805	.801	.812	.568	.623	.666	.710	.720	.713	.709	.673
	.577	.132	.158	.190	.205	.199	.211	.199	.577	.149	.169	.196	.205	.199	.211	.211
Main stage	.587	.063	.088	.115	.119	.112	.125	.107	.587	.091	.100	.120	.119	.118	.125	.124
	.597	.034	.054	.080	.084	.071	.078	.066	.597	.051	.054	.068	.061	.072	.072	.066
	.607	.022	.036	.057	.061	.048	.055	.037	.607	.045	.042	.063	.061	.048	.055	.055
	.617	.016	.025	.045	.049	.037	.044	.026	.617	.034	.036	.051	.049	.037	.044	.043
	.627	.005	.019	.038	.032	.025	.026	.014	.627	.028	.025	.039	.038	.025	.038	.032
Main stage	.637	.006	.008	.028	.032	.019	.020	.009	.637	.022	.019	.028	.032	.019	.026	.020
	.657	.011	.004	.016	.016	.010	.013	.001	.657	.016	.008	.020	.020	.014	.022	.020
	.677	.013	.006	.010	.013	.006	.009	.005	.677	.003	.002	.010	.009	.002	.015	.016
	.697	.017	.000	.009	.009	.002	.005	.005	.697	.014	.000	.010	.009	.002	.013	.018
	.717	.022	.010	.009	.009	.000	.005	.003	.717	.007	.002	.009	.005	.000	.009	.020
Main stage	.737	.025	.016	.007	.003	.004	.001	.007	.737	.001	.004	.024	.001	.004	.007	.020
	.755	.026	.021	.003	.007	.008	.005	.019	.755	.001	.010	.014	.001	.006	.003	.018
	.777	.028	.021	.003	.007	.008	.005	.009	.777	.001	.010	.014	.001	.006	.003	.018
	.785	.028	.021	.003	.007	.008	.005	.009	.785	.001	.010	.014	.001	.006	.003	.018
	.817	.028	.021	.003	.007	.008	.005	.009	.817	.001	.010	.014	.001	.006	.003	.018
Main stage	.837	.022	.017	.001	.003	.003	.004	.004	.837	.005	.005	.005	.003	.002	.011	.025
	.857	.022	.017	.001	.003	.003	.004	.004	.857	.005	.005	.005	.003	.002	.011	.025
	.877	.023	.017	.001	.003	.003	.004	.005	.877	.006	.006	.007	.006	.000	.014	.026
	.897	.018	.013	.004	.006	.001	.007	.000	.897	.006	.002	.008	.006	.003	.018	.026
	.917	.018	.013	.004	.006	.001	.007	.000	.917	.006	.002	.008	.006	.003	.018	.026
Main stage	.937	.018	.013	.004	.006	.001	.007	.000	.937	.006	.002	.008	.006	.003	.018	.026
	.957	.018	.013	.004	.006	.001	.007	.000	.957	.006	.002	.008	.006	.003	.018	.026
	.977	.018	.013	.004	.006	.001	.007	.000	.977	.006	.002	.008	.006	.003	.018	.026
	.997	.018	.013	.004	.006	.001	.007	.000	.997	.006	.002	.008	.006	.003	.018	.026
	.997	.018	.013	.004	.006	.001	.007	.000	.997	.006	.002	.008	.006	.003	.018	.026

TABLE 5.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for -										C_p for -									
$\beta = -60^\circ$										$\beta = -90^\circ$									
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
Nozzle		.410	.247	.261	.242	.194	.142	.084	Main stage	Nozzle	.400	.163	.239	.253	.260	.261	.226	.159	
		.420	.213	.228	.208	.155	.109	.031			.430	.068	.133	.146	.148	.138	.109	.048	
		.430	.180	.194	.169	.121	.070	.003			.450	-.016	.043	.040	.042	.043	.014	-.043	
		.450	.085	.093	.074	.026	-.026	-.090			.465	-.277	-.222	-.219	-.212	-.216	-.246	-.286	
Upper stage		.460	.016	-.039	-.084	-.083	-.107	-.136	Transition	Upper stage	.465	-.277	-.222	-.219	-.212	-.216	-.246	-.286	
		.465	-.144	-.100	-.084	-.083	-.107	-.136			.471	-.972	-.958	-1.031	-1.011	-.998	-1.046	-1.045	
		.471	.961	.569	-1.054	-1.131	-1.162	-1.161			.491	-.120	-.054	-.039	-.026	-.031	-.067	-.112	
		.476	.284	.244	-.258	-.245	-.250	-.308			.511	-.022	.056	.070	.084	.079	.043	-.009	
Transition		.481	.137	.105	-.114	-.101	-.136	-.164	Transition	Transition	.531	.283	.350	.364	.372	.367	.337	.279	
		.481	-.080	-.036	-.039	-.032	-.061	-.089			.552	-.057	-.002	.007	.008	.004	-.026	-.078	
		.501	-.028	.021	.018	.026	.084	.060			.568	-.959	-.909	-.907	-.911	-.909	-.946	-.956	
		.511	.030	.079	.076	.084	.060	.026			.587	-.201	-.140	-.132	-.124	-.118	-.148	-.188	
Main stage		.521	.122	.165	.168	.176	.135	.095	Main stage	Main stage	.607	-.138	-.077	-.068	-.061	-.054	-.084	-.130	
		.531	.353	.379	.364	.344	.302	.251			.627	-.120	-.054	-.045	-.038	-.031	-.067	-.107	
		.539	.274	.266	.235	.213	.192	.151			.657	-.109	-.040	-.028	-.020	-.021	-.051	-.097	
		.546	.215	.203	.168	.105	.077	.035			.697	-.101	-.033	-.022	-.011	-.012	-.044	-.088	
		.552	.024	.038	.018	.008	-.014	-.107			.737	-.092	-.027	-.014	-.005	-.006	-.036	-.080	
		.562	-.220	-.217	-.238	-.253	-.312	-.352			.777	-.086	-.023	-.010	-.003	-.002	-.030	-.072	
		.568	-.608	-.805	-.820	-.824	-.817	-.836			-.846	.785	-.092	-.025	-.010	-.002	-.026	-.068	
		.577	-.219	.192	.201	.205	.199	.223			.245	.817	-.082	-.022	-.011	-.003	-.030	-.072	
		.587	.155	.123	.126	.119	.118	.142			.165	.857	-.101	-.033	-.022	-.011	-.003	-.030	-.072
		.597	.120	.083	.086	.078	.071	.101			.124	.897	-.084	-.025	-.010	-.002	-.002	-.026	-.068
		.607	.109	.065	.063	.061	.048	-.072			-.101	.937	-.120	-.054	-.045	-.038	-.031	-.067	-.107
		.617	.091	.054	.051	.049	.042	-.061			-.089	.957	-.959	-.909	-.907	-.911	-.909	-.946	-.956
		.627	-.086	-.048	-.045	-.038	-.031	-.055			-.078	.977	-.201	-.140	-.132	-.124	-.118	-.148	-.188
		.637	-.080	-.042	-.034	-.032	-.019	-.044			-.072	.987	-.138	-.077	-.068	-.061	-.054	-.084	-.130
		.657	-.074	-.031	-.024	-.018	-.012	-.034			-.053	.997	-.120	-.054	-.045	-.038	-.031	-.067	-.107
		.677	-.063	-.022	-.019	-.009	-.008	-.030			-.047		-.109	-.040	-.028	-.020	-.021	-.051	-.097
	.697	-.051	-.013	-.012	-.005	-.002	-.022	-.037		-.101	-.033	-.022	-.011	-.012	-.044	-.088			
	.717	-.063	-.011	-.010	-.005	-.002	-.019	-.030		-.092	-.027	-.014	-.005	-.006	-.036	-.080			
	.737	-.059	-.009	-.009	-.009	-.009	-.009	-.030		-.086	-.023	-.010	-.003	-.002	-.030	-.072			
	.757	-.063	-.013	-.009	-.001	.004	-.017	-.030		-.092	-.025	-.010	-.002	-.002	-.026	-.068			
	.777	-.053	-.010	-.005	.000	.003	-.016	-.026		-.082	-.022	-.011	-.003	-.003	-.030	-.072			
	.797	-.059	-.010	-.003	-.001	-.001	-.019	-.026		-.084	-.025	-.014	-.006	-.006	-.034	-.073			
	.817	-.060	-.015	-.010	-.004	-.001	-.018	-.026											
	.837	-.071	.022	.017	.010	-.007	-.031	-.041											
	.857	-.073	.023	.018	.012	-.006	-.033	-.101											
	.877	-.073	.023	.018	.012	-.006	-.033	-.122											

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$														
x/l	$\alpha = 0^\circ$						$\alpha = -30^\circ$							
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	Roar	Transition	Flare	Upper stage	Main stage	Roar	
	.410	.370	.312	.262	.212	.169	.126	.410	.348	.301	.254	.208	.165	.111
	.420	.382	.322	.272	.222	.179	.135	.420	.314	.267	.217	.171	.126	.073
	.430	.391	.330	.280	.230	.187	.143	.430	.280	.233	.186	.133	.094	.040
	.440	.401	.340	.290	.240	.197	.153	.440	.290	.243	.189	.136	.094	.040
	.450	.411	.350	.300	.250	.207	.163	.450	.300	.253	.206	.153	.110	.060
	.460	.421	.360	.310	.260	.217	.173	.460	.310	.263	.216	.163	.120	.070
	.470	.431	.370	.320	.270	.227	.183	.470	.320	.273	.226	.173	.130	.080
	.480	.441	.380	.330	.280	.237	.193	.480	.330	.283	.236	.183	.140	.090
	.490	.451	.390	.340	.290	.247	.203	.490	.340	.293	.246	.193	.150	.100
	.500	.461	.400	.350	.300	.257	.213	.500	.350	.303	.256	.203	.160	.110
	.510	.471	.410	.360	.310	.267	.223	.510	.360	.313	.266	.213	.170	.120
	.520	.481	.420	.370	.320	.277	.233	.520	.370	.323	.276	.223	.180	.130
	.530	.491	.430	.380	.330	.287	.243	.530	.380	.333	.286	.233	.190	.140
	.540	.501	.440	.390	.340	.297	.253	.540	.390	.343	.296	.243	.200	.150
	.550	.511	.450	.400	.350	.307	.263	.550	.400	.353	.306	.253	.210	.160
	.560	.521	.460	.410	.360	.317	.273	.560	.410	.363	.316	.263	.220	.170
	.570	.531	.470	.420	.370	.327	.283	.570	.420	.373	.326	.273	.230	.180
	.580	.541	.480	.430	.380	.337	.293	.580	.430	.383	.336	.283	.240	.190
	.590	.551	.490	.440	.390	.347	.303	.590	.440	.393	.346	.293	.250	.200
	.600	.561	.500	.450	.400	.357	.313	.600	.450	.403	.356	.303	.260	.210
	.610	.571	.510	.460	.410	.367	.323	.610	.460	.413	.366	.313	.270	.220
	.620	.581	.520	.470	.420	.377	.333	.620	.470	.423	.376	.323	.280	.230
	.630	.591	.530	.480	.430	.387	.343	.630	.480	.433	.386	.333	.290	.240
	.640	.601	.540	.490	.440	.397	.353	.640	.490	.443	.396	.343	.300	.250
	.650	.611	.550	.500	.450	.407	.363	.650	.500	.453	.406	.353	.310	.260
	.660	.621	.560	.510	.460	.417	.373	.660	.510	.463	.416	.363	.320	.270
	.670	.631	.570	.520	.470	.427	.383	.670	.520	.473	.426	.373	.330	.280
	.680	.641	.580	.530	.480	.437	.393	.680	.530	.483	.436	.383	.340	.290
	.690	.651	.590	.540	.490	.447	.403	.690	.540	.493	.446	.393	.350	.300
	.700	.661	.600	.550	.500	.457	.413	.700	.550	.503	.456	.403	.360	.310
	.710	.671	.610	.560	.510	.467	.423	.710	.560	.513	.466	.413	.370	.320
	.720	.681	.620	.570	.520	.477	.433	.720	.570	.523	.476	.423	.380	.330
	.730	.691	.630	.580	.530	.487	.443	.730	.580	.533	.486	.433	.390	.340
	.740	.701	.640	.590	.540	.497	.453	.740	.590	.543	.496	.443	.400	.350
	.750	.711	.650	.600	.550	.507	.463	.750	.600	.553	.506	.453	.410	.360
	.760	.721	.660	.610	.560	.517	.473	.760	.610	.563	.516	.463	.420	.370
	.770	.731	.670	.620	.570	.527	.483	.770	.620	.573	.526	.473	.430	.380
	.780	.741	.680	.630	.580	.537	.493	.780	.630	.583	.536	.483	.440	.390
	.790	.751	.690	.640	.590	.547	.503	.790	.640	.593	.546	.493	.450	.400
	.800	.761	.700	.650	.600	.557	.513	.800	.650	.603	.556	.503	.460	.410
	.810	.771	.710	.660	.610	.567	.523	.810	.660	.613	.566	.513	.470	.420
	.820	.781	.720	.670	.620	.577	.533	.820	.670	.623	.576	.523	.480	.430
	.830	.791	.730	.680	.630	.587	.543	.830	.680	.633	.586	.533	.490	.440
	.840	.801	.740	.690	.640	.597	.553	.840	.690	.643	.596	.543	.500	.450
	.850	.811	.750	.700	.650	.607	.563	.850	.700	.653	.606	.553	.510	.460
	.860	.821	.760	.710	.660	.617	.573	.860	.710	.663	.616	.563	.520	.470
	.870	.831	.770	.720	.670	.627	.583	.870	.720	.673	.626	.573	.530	.480
	.880	.841	.780	.730	.680	.637	.593	.880	.730	.683	.636	.583	.540	.490
	.890	.851	.790	.740	.690	.647	.603	.890	.740	.693	.646	.593	.550	.500
	.900	.861	.800	.750	.700	.657	.613	.900	.750	.703	.656	.603	.560	.510
	.910	.871	.810	.760	.710	.667	.623	.910	.760	.713	.666	.613	.570	.520
	.920	.881	.820	.770	.720	.677	.633	.920	.770	.723	.676	.623	.580	.530
	.930	.891	.830	.780	.730	.687	.643	.930	.780	.733	.686	.633	.590	.540
	.940	.901	.840	.790	.740	.697	.653	.940	.790	.743	.696	.643	.600	.550
	.950	.911	.850	.800	.750	.707	.663	.950	.800	.753	.706	.653	.610	.560
	.960	.921	.860	.810	.760	.717	.673	.960	.810	.763	.716	.663	.620	.570
	.970	.931	.870	.820	.770	.727	.683	.970	.820	.773	.726	.673	.630	.580
	.980	.941	.880	.830	.780	.737	.693	.980	.830	.783	.736	.683	.640	.590
	.990	.951	.890	.840	.790	.747	.703	.990	.840	.793	.746	.693	.650	.600
	.997	.957	.897	.847	.797	.757	.713	.997	.847	.797	.750	.703	.660	.610

TABLE 8.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -90^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$							
		x/l							$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	Transition	.410	.305	.295	.278	.250	.220	.180	.400	.226	.276	.297	.299	.287	.267
		.420	.272	.261	.240	.213	.182	.139	.430	.121	.163	.180	.179	.167	.143
		.430	.238	.223	.203	.179	.144	.105	.450	.035	.073	.086	.085	.073	.049
		.440	.200	.189	.169	.144	.112	.085	.465	.015	.031	.041	.037	.027	.002
		.450	.166	.155	.135	.110	.085	.051	.471	-.010	-.026	-.037	-.038	-.027	-.009
Upper stage	Flare	.465	.130	.119	.099	.074	.049	.014	.481	-.037	-.053	-.064	-.065	-.053	-.029
		.475	.100	.089	.069	.044	.019	-.016	.491	-.060	-.076	-.087	-.088	-.076	-.052
		.485	.066	.055	.035	.010	-.015	-.050	.501	-.086	-.102	-.113	-.114	-.102	-.078
		.495	.030	.019	.009	.004	.004	.004	.511	-.110	-.126	-.137	-.138	-.126	-.102
		.505	.000	-.010	-.020	-.020	-.020	-.020	.521	-.137	-.153	-.164	-.165	-.153	-.129
Nose	Nose	.515	-.030	-.040	-.050	-.050	-.050	-.050	.531	-.160	-.176	-.187	-.188	-.176	-.152
		.525	-.060	-.070	-.080	-.080	-.080	-.080	.541	-.186	-.202	-.213	-.214	-.202	-.178
		.535	-.090	-.100	-.110	-.110	-.110	-.110	.551	-.211	-.227	-.238	-.239	-.227	-.203
		.545	-.120	-.130	-.140	-.140	-.140	-.140	.561	-.236	-.252	-.263	-.264	-.252	-.228
		.555	-.150	-.160	-.170	-.170	-.170	-.170	.571	-.261	-.277	-.288	-.289	-.277	-.253

TABLE 8.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(a) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 0^\circ$							C_p for $\beta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$							
Main stage	x/t														
		.565	.473	.416	.370	.322	.284	.232	.510	.455	.404	.364	.325	.278	.220
		.519	.443	.392	.346	.298	.251	.202	.477	.425	.377	.334	.282	.242	.184
		.483	.407	.356	.307	.262	.219	.166	.430	.385	.350	.307	.265	.213	.151
		.405	.336	.288	.241	.196	.153	.101	.450	.369	.321	.278	.235	.190	.086
Transition		.336	.270	.228	.187	.145	.105	.059	.309	.258	.222	.184	.145	.102	.050
		.264	.213	.171	.130	.097	.060	.017	.465	.397	.365	.330	.296	.260	.014
		.489	.514	.536	.547	.560	.577	.603	.616	.641	.663	.681	.699	.748	.748
		.566	.632	.666	.692	.714	.715	.747	.585	.559	.537	.518	.508	.482	.450
		.428	.516	.570	.612	.637	.664	.679	.483	.458	.439	.427	.419	.406	.388
Flare		.252	.357	.416	.467	.513	.554	.595	.274	.303	.329	.344	.352	.361	.370
		.129	.234	.301	.354	.405	.454	.501	.153	.231	.281	.319	.342	.366	.388
		.220	.195	.194	.131	.054	.120	.146	.501	.511	.518	.521	.521	.521	.521
		.383	.367	.349	.248	.116	.071	.036	.359	.358	.336	.302	.266	.223	.183
		.654	.580	.503	.341	.224	.201	.147	.624	.565	.484	.310	.220	.204	.141
Nose		.564	.524	.494	.404	.273	.253	.209	.391	.451	.475	.462	.425	.366	.273
		.479	.436	.411	.386	.279	.250	.215	.546	.529	.511	.487	.462	.432	.399
		.409	.363	.332	.312	.227	.204	.172	.552	.531	.529	.512	.488	.463	.438
		.260	.214	.177	.136	.050	.031	.008	.562	.526	.495	.420	.312	.223	.163
Main stage		.661	.677	.696	.707	.722	.721	.755	.646	.652	.668	.667	.692	.721	.768
		.614	.682	.657	.652	.649	.644	.656	.577	.529	.566	.552	.615	.631	.610
		.296	.287	.287	.283	.273	.250	.259	.308	.380	.430	.422	.410	.442	.456
		.209	.209	.209	.209	.209	.209	.209	.597	.597	.597	.597	.597	.597	.597
		.163	.163	.163	.163	.163	.163	.163	.607	.607	.607	.607	.607	.607	.607
Transition		.144	.144	.144	.144	.144	.144	.144	.617	.617	.617	.617	.617	.617	.617
		.135	.135	.135	.135	.135	.135	.135	.627	.627	.627	.627	.627	.627	.627
		.120	.120	.120	.120	.120	.120	.120	.637	.637	.637	.637	.637	.637	.637
		.114	.114	.114	.114	.114	.114	.114	.657	.657	.657	.657	.657	.657	.657
		.066	.066	.066	.066	.066	.066	.066	.677	.677	.677	.677	.677	.677	.677
Main stage		.050	.050	.050	.050	.050	.050	.050	.697	.697	.697	.697	.697	.697	.697
		.035	.035	.035	.035	.035	.035	.035	.737	.737	.737	.737	.737	.737	.737
		.018	.018	.018	.018	.018	.018	.018	.777	.777	.777	.777	.777	.777	.777
		.001	.001	.001	.001	.001	.001	.001	.817	.817	.817	.817	.817	.817	.817
		.010	.010	.010	.010	.010	.010	.010	.857	.857	.857	.857	.857	.857	.857
Main stage		.058	.058	.058	.058	.058	.058	.058	.877	.877	.877	.877	.877	.877	.877
		.037	.037	.037	.037	.037	.037	.037	.917	.917	.917	.917	.917	.917	.917
		.002	.002	.002	.002	.002	.002	.002	.957	.957	.957	.957	.957	.957	.957
									.997	.997	.997	.997	.997	.997	.997

TABLE 2.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						
		$\beta = -5^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	$x/2$	.400	.327	.383	.404	.406	.397	.374
		.430	.234	.282	.293	.304	.292	.263
Transition	$x/2$	.450	.171	.219	.231	.235	.223	.198
		.465	.037	.087	.102	.106	.100	.075
Upper stage	$x/2$	.471	-.625	-.576	-.561	-.554	-.544	-.596
		.491	-.277	-.456	-.463	-.230	-.480	-.245
Flare	$x/2$	.511	.016	.112	.139	.079	.131	.111
		.531	.380	.432	.410	.264	.412	.356
Nose	$x/2$	.552	.184	.268	.296	.288	.288	.154
		.568	-.757	-.727	-.724	-.707	-.722	-.768
Main stage	$x/2$	.587	-.513	-.491	-.493	-.413	-.481	-.536
		.607	-.383	-.327	-.285	-.280	-.274	-.394
Transition	$x/2$	.627	-.296	-.194	-.170	-.178	-.172	-.280
		.657	-.201	-.134	-.105	-.101	-.109	-.207
Upper stage	$x/2$	.697	-.162	-.099	-.074	-.070	-.076	-.161
		.737	-.146	-.087	-.062	-.057	-.064	-.139
Flare	$x/2$	.777	-.129	-.073	-.048	-.048	-.052	-.114
		.817	-.134	-.073	-.046	-.043	-.048	-.096
Main stage	$x/2$	.857	-.106	-.060	-.033	-.039	-.040	-.055
		.897	-.062	-.080	.017	-.040	-.017	-.034
Transition	$x/2$	.937	-.042	.005	.024	.028	.025	-.062
		.977	-.098	-.080	-.096	-.096	-.107	-.149

TABLE 8.- PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Continued

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$					
x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Nose	.410	.509	.417	.363	.956	.272	.230	.194	.410	.477	.399	.355	.303	.277	.228
	.420	.519	.431	.371	.308	.282	.241	.199	.420	.474	.409	.355	.305	.282	.233
	.430	.509	.425	.363	.319	.272	.241	.188	.430	.474	.412	.355	.311	.274	.234
	.450	.495	.415	.358	.319	.269	.233	.183	.450	.461	.399	.350	.316	.269	.236
	.460	.469	.399	.352	.313	.277	.230	.178	.460	.439	.368	.347	.313	.277	.233
Main stage	.465	.431	.375	.334	.297	.264	.222	.172	.465	.405	.362	.328	.297	.264	.225
	.471	.280	.215	.233	.251	.222	.207	.307	.471	.311	.325	.341	.362	.385	.415
	.476	.183	.273	.304	.331	.349	.369	.396	.476	.303	.336	.354	.369	.382	.408
	.481	.201	.273	.304	.331	.349	.369	.396	.481	.245	.326	.350	.368	.394	.421
	.491	.100	.183	.219	.254	.280	.304	.330	.491	.108	.180	.245	.272	.301	.336
Upper stage	.501	.045	.122	.151	.191	.217	.232	.130	.501	.075	.133	.159	.191	.214	.232
	.511	.028	.092	.115	.141	.222	.097	.073	.511	.061	.108	.126	.147	.167	.186
	.521	.023	.026	.102	.210	.203	.160	.128	.521	.042	.105	.124	.146	.195	.270
	.531	.524	.441	.390	.320	.232	.213	.186	.531	.496	.430	.377	.317	.244	.188
Transition	.539	.642	.579	.510	.414	.298	.234	.216	.539	.493	.506	.478	.419	.396	.354
	.546	.574	.533	.500	.441	.333	.264	.243	.546	.403	.444	.453	.438	.409	.365
	.552	.526	.479	.451	.414	.333	.267	.243	.552	.496	.468	.448	.414	.355	.300
	.562	.428	.381	.348	.305	.230	.172	.140	.562	.393	.362	.337	.297	.252	.207
Flare	.568	.334	.354	.371	.387	.386	.384	.403	.568	.334	.343	.355	.356	.372	.384
	.577	.185	.241	.272	.288	.259	.236	.227	.577	.243	.280	.300	.304	.295	.307
	.587	.133	.197	.239	.255	.251	.247	.254	.587	.197	.197	.228	.244	.237	.247
	.597	.081	.145	.184	.208	.221	.230	.246	.597	.141	.114	.140	.150	.160	.164
	.607	.050	.109	.146	.166	.188	.200	.205	.607	.078	.122	.151	.166	.185	.192
Main stage	.617	.039	.092	.121	.139	.154	.161	.155	.617	.064	.103	.123	.139	.152	.159
	.627	.025	.076	.104	.114	.124	.123	.108	.627	.059	.089	.104	.117	.124	.128
	.637	.014	.059	.079	.087	.091	.090	.073	.637	.048	.076	.090	.092	.097	.098
	.657	.020	.067	.066	.066	.055	.045	.035	.657	.041	.055	.064	.061	.051	.051
	.677	.019	.031	.043	.043	.038	.025	.021	.677	.038	.032	.040	.036	.036	.036
Transition	.697	.010	.038	.043	.033	.021	.012	.017	.697	.038	.044	.039	.037	.030	.025
	.737	.018	.026	.026	.036	.026	.023	.008	.737	.042	.037	.028	.032	.026	.025
	.777	.016	.014	.030	.024	.026	.026	.014	.777	.040	.021	.027	.019	.024	.027
	.785	.024	.008	.019	.016	.016	.012	.005	.785	.015	.015	.017	.010	.014	.017
	.817	.024	.003	.006	.022	.020	.011	.006	.817	.002	.002	.009	.019	.018	.022
Upper stage	.857	.022	.010	.004	.004	.001	.006	.013	.857	.006	.004	.011	.012	.010	.021
	.877	.033	.002	.008	.000	.003	.006	.010	.877	.003	.012	.010	.004	.005	.018
	.897	.014	.004	.001	.005	.010	.015	.018	.897	.009	.006	.005	.006	.006	.019
									.917	.009	.006	.014	.016	.019	.037
									.957	.012	.015	.014	.016	.019	.037
Main stage									.997	.001	.021	.036	.054	.072	.081

TABLE 2. - PRESSURE COEFFICIENTS FOR CONFIGURATION 123 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Nose		.410	.365	.345	.328	.303	.280	.238	.400	.293	.312	.311	.306	.294	.258
		.420	.375	.356	.331	.311	.285	.249	.430	.295	.302	.308	.304	.286	.236
		.430	.373	.359	.328	.311	.282	.252	.450	.253	.300	.316	.298	.289	.234
		.450	.362	.351	.331	.313	.285	.254	.460	.194	.275	.276	.269	.246	.188
		.460	.341	.343	.328	.313	.288	.246	.471	.269	.245	.244	.227	.245	.288
		.465	.188	.161	.143	.139	.141	.164	.465	.249	.275	.276	.269	.246	.188
		.471	.382	.371	.367	.371	.381	.391	.471	.269	.245	.244	.227	.245	.288
		.476	.371	.380	.381	.388	.406	.419	.491	.259	.252	.259	.269	.282	.306
		.481	.283	.314	.326	.344	.365	.394	.511	.174	.153	.147	.157	.177	.232
		.491	.201	.226	.241	.251	.267	.293	.531	.277	.330	.306	.324	.300	.238
		.501	.163	.174	.181	.193	.212	.235							
		.511	.141	.139	.137	.147	.148	.068							
		.521	.105	.C32	.154	.216	.203	.160							
		.531	.384	.372	.357	.309	.280	.229							
		.539	.591	.555	.502	.417	.344	.286							
		.546	.548	.530	.497	.446	.376	.318							
		.552	.390	.419	.424	.408	.379	.337	.552	.306	.407	.408	.401	.362	.278
		.562	.306	.322	.315	.297	.276	.245							
		.568	.386	.373	.374	.378	.386	.406	.568	.430	.391	.378	.391	.406	.439
		.577	.315	.315	.314	.310	.336	.373							
		.587	.229	.244	.250	.241	.276	.313	.587	.306	.280	.241	.265	.288	.329
		.597	.174	.183	.195	.194	.212	.247	.607	.235	.189	.164	.174	.203	.246
		.607	.155	.153	.157	.164	.168	.183	.627	.216	.136	.117	.116	.137	.227
		.617	.144	.139	.135	.139	.143	.153	.657	.153	.080	.049	.055	.088	.154
		.627	.141	.122	.118	.120	.124	.137	.697	.147	.082	.043	.052	.075	.150
		.637	.125	.103	.093	.095	.097	.112	.737	.118	.066	.034	.034	.063	.125
		.657	.123	.064	.055	.047	.051	.076	.777	.083	.049	.020	.024	.049	.103
		.677	.111	.062	.047	.043	.046	.063	.785	.093	.053	.015	.023	.049	.106
		.697	.099	.061	.039	.038	.042	.050	.817	.083	.030	.015	.019	.041	.093
		.737	.068	.055	.034	.032	.033	.051	.857	.086	.030	.019	.032	.051	.090
		.777	.069	.042	.029	.020	.027	.038	.897	.042	.018	.006	.007	.027	.078
		.785	.058	.041	.023	.011	.020	.038							
		.817	.057	.028	.014	.016	.019	.032							
		.857	.064	.017	.017	.018	.025	.049							
		.877	.054	.029	.010	.005	.010	.022							
		.897	.044	.029	.012	.001	.004	.018							
		.917	.071	.033	.018	.007	.009	.021							
		.957	.069	.036	.017	.016	.020	.034							
		.997	.061	.047	.045	.055	.067	.089							
Main stage															
Transition															
Plate															
Upper stage															
Nose															

TABLE 9.- PRESSURE COEFFICIENTS FOR CONFIGURATION 223

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

		C_p for -					C_p for -				
		$\beta = 0^\circ$					$\beta = -30^\circ$				
x/l		$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Nose	.428	.395	.436	.453	.499	.561	.438	.307	.362	.405	.474
	.438	.307	.346	.360	.408	.474	.448	.198	.248	.267	.393
	.458	.188	.231	.247	.306	.384	.458	.057	.101	.130	.244
	.471	.159	.115	.134	.203	.294	.471	.283	.125	.192	.291
Upper stage	.476	.278	.676	.720	.834	.978	.476	.300	.653	.703	.919
	.481	.143	.345	.449	.568	.853	.491	.143	.336	.449	.662
	.501	.042	.027	.034	.249	.288	.491	.042	.027	.038	.288
	.511	.070	.086	.096	.084	.163	.501	.014	.027	.035	.163
Transition	.521	.149	.174	.180	.181	.108	.521	.070	.086	.091	.042
	.531	.339	.343	.338	.302	.265	.531	.160	.178	.180	.083
	.539	.191	.212	.223	.246	.331	.539	.339	.348	.342	.223
	.546	.102	.121	.136	.182	.306	.546	.191	.217	.253	.350
Main stage	.552	.014	.026	.038	.093	.230	.552	.047	.076	.091	.274
	.562	.235	.233	.206	.114	.047	.562	.014	.026	.042	.217
	.568	.628	.1005	.1115	.110	.830	.568	.235	.237	.210	.009
	.577	.189	.222	.225	.290	.722	.577	.191	.217	.253	.776
	.587	.110	.130	.129	.106	.619	.587	.110	.130	.129	.558
	.597	.076	.088	.087	.074	.520	.597	.076	.070	.106	.481
	.607	.054	.065	.062	.060	.401	.607	.054	.065	.060	.318
	.617	.042	.052	.050	.049	.289	.617	.042	.052	.060	.298
	.627	.231	.042	.041	.038	.148	.627	.031	.052	.049	.164
	.637	.020	.033	.029	.031	.052	.637	.020	.033	.042	.055
	.657	.016	.022	.019	.021	.017	.657	.020	.033	.042	.010
	.677	.012	.019	.015	.018	.010	.677	.009	.024	.023	.012
	.697	.009	.013	.011	.014	.005	.697	.009	.013	.012	.015
	.737	.009	.009	.008	.012	.009	.737	.009	.016	.014	.003
	.777	.001	.009	.006	.007	.009	.777	.001	.006	.009	.008
	.785	.003	.002	.000	.002	.007	.785	.003	.006	.003	.006
	.817	.001	.002	.000	.003	.008	.817	.001	.002	.002	.004
	.857	.001	.005	.003	.006	.013	.857	.001	.007	.004	.008
	.877	.003	.005	.002	.006	.013	.877	.003	.007	.004	.015
	.897	.006	.008	.005	.009	.016	.897	.006	.008	.009	.017
							.917	.006	.008	.011	.018
							.957	.006	.010	.021	.030
							.977	.016	.018	.023	.104
							.997	.069	.076	.088	

TABLE 9.- PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

x/l		C_p for -					
		$\beta = -60^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Rose		.438	.338	.360	.401	.430	.474
		.448	.248	.767	.314	.348	.393
		.458	.115	.138	.206	.247	.297
		.471	-1.095	-1.080	-1.054	-1.087	-1.055
Upper stage		.476	-.662	-.691	-.636	-.682	-.965
		.481	-.143	-.474	-.547	-.538	-.674
		.491	-.042	-.083	-.314	-.343	-.285
		.501	.014	.042	-.060	-.135	-.167
Transition		.511	.070	.101	.087	.040	-.045
		.521	.149	.180	.173	.157	.083
		.531	.334	.330	.277	.255	.217
		.539	.191	.223	.249	.282	.375
Main stage		.546	.091	.132	.182	.225	.321
		.552	.014	.038	.086	.132	.205
		.562	-.235	-.218	-.136	-.075	.009
		.568	-.639	-1.115	-1.113	-.971	-.821
Transition		.577	-.177	-.217	-.254	-.671	-.564
		.587	-.130	-.133	-.114	-.199	-.452
		.597	-.076	-.083	-.074	-.054	-.372
		.607	-.054	-.065	-.060	-.031	-.298
Main stage		.617	-.042	-.050	-.049	-.031	-.167
		.627	-.031	-.042	-.041	-.031	-.058
		.637	-.020	-.033	-.035	-.027	-.016
		.657	-.020	-.024	-.023	-.020	.010
Transition		.677	-.014	-.019	-.015	-.016	.012
		.697	-.009	-.009	-.012	-.013	.004
		.737	-.005	-.012	-.006	-.011	.007
		.777	-.001	-.009	-.002	-.005	.008
Main stage		.785	-.001	.006	.002	.005	.007
		.817	.000	.001	.001	.004	.008
		.857	-.003	-.004	-.004	-.007	.014
		.877	-.004	-.007	-.007	-.009	.015
Transition		.897	-.006	-.007	-.005	-.011	.016
		.917	-.009	-.013	-.014	-.015	.021
		.957	-.016	-.019	-.018	-.023	.030
		.997	-.069	-.076	-.075	-.088	.104

x/l		C_p for -					
		$\beta = -90^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Rose		.428	.431	.449	.492	.518	.554
		.448	.240	.263	.311	.348	.387
		.458	.106	.134	.199	.244	.294
		.471	-1.243	-1.151	-1.159	-1.031	-.893
Upper stage		.491	-.042	-.083	-.285	-.330	-.297
		.511	.070	.101	.080	.033	-.045
		.531	.339	.334	.288	.268	.198
		.552	.003	.038	.086	.136	.205
Transition		.568	-1.037	-1.107	-1.128	-.978	-.834
		.587	-.110	-.133	-.110	-.186	-.449
		.607	-.054	-.065	-.062	-.034	-.295
		.627	-.031	-.042	-.041	-.031	-.058
Main stage		.657	-.020	-.024	-.024	-.021	.008
		.697	-.009	-.016	-.012	-.015	.001
		.737	-.005	-.012	-.006	-.011	-.007
		.777	-.001	-.009	-.005	-.007	-.008
Transition		.785	-.001	-.009	-.008	-.006	-.008
		.817	.000	.000	.003	-.003	-.006
		.857	-.003	-.005	-.007	-.008	-.014
		.897	-.006	-.008	-.006	-.011	-.017

TABLE 9.- PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(b) $\beta = 0.60$; $\alpha = -10^\circ$ to 10°

x/l		C_p for $\beta = 0^\circ$				
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$
Main stage	897	.007	-.008	-.008	-.009	-.004
	887	.010	-.006	-.006	-.001	-.001
	857	.010	-.006	-.006	-.001	-.001
	817	.014	-.002	-.002	-.004	-.004
	785	.014	-.002	-.002	-.004	-.004
Transition	777	.009	-.004	-.004	-.001	-.001
	777	.009	-.004	-.004	-.001	-.001
	737	.005	-.012	-.011	-.003	-.003
	697	.003	-.010	-.010	-.005	-.005
	657	.003	-.010	-.010	-.005	-.005
Flare	568	.770	-.814	-.771	-.709	-.664
	577	.169	-.191	-.211	-.205	-.212
	587	.089	-.117	-.125	-.119	-.126
	597	.060	-.083	-.085	-.074	-.086
	607	.043	-.060	-.062	-.051	-.063
Nose	617	.031	-.048	-.052	-.039	-.046
	627	.020	-.037	-.039	-.028	-.034
	637	.014	-.031	-.029	-.017	-.023
	657	.003	-.018	-.018	-.009	-.011
	677	.001	-.014	-.014	-.005	-.010

TABLE 223 - PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for -						
		$\beta = -90^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Nose	.438		.374	.346	.320	.283	.233	.138
	.440	.280	.252	.227	.178	.139	.119	.059
Stage	.450	.141	.113	.077	.050	.017	-1.069	-1.21
	.471	-1.391	-1.441	-1.465	-1.455	-1.444	-1.435	-1.456
Upper stage	.476	.339	.367	.377	.377	.364	.438	.485
	.481	.163	.168	.166	.182	.199	.199	.257
Upper stage	.491	.060	.060	.052	.056	.068	.114	.114
	.501	.003	.009	.011	.012	.005	.031	.051
Upper stage	.511	.066	.072	.073	.069	.058	.006	.006
	.521	.157	.157	.165	.155	.137	.080	.080
Upper stage	.531	.368	.351	.336	.320	.291	.228	.228
	.539	.256	.234	.208	.175	.141	.084	.084
Transition flap	.546	.198	.168	.101	.110	.076	.019	.019
	.552	.037	.026	.010	.016	.045	.121	.121
Transition flap	.562	.227	.238	.248	.270	.299	.363	.363
	.568	.798	.809	.790	.783	.800	.864	.864
Main stage	.577	.197	.197	.201	.205	.217	.263	.263
	.587	.129	.128	.127	.125	.137	.177	.177
Main stage	.597	.089	.083	.081	.085	.097	.143	.143
	.607	.071	.060	.064	.062	.063	.120	.120
Main stage	.617	.017	.040	.052	.051	.057	.109	.109
	.627	.054	.048	.041	.039	.051	.092	.092
Main stage	.637	.043	.037	.029	.033	.039	.086	.086
	.647	.035	.029	.022	.024	.036	.073	.073
Main stage	.657	.028	.022	.017	.020	.031	.064	.064
	.667	.020	.014	.012	.016	.026	.055	.055
Main stage	.677	.014	.008	.008	.011	.018	.048	.048
	.687	.010	.010	.006	.009	.015	.040	.040
Main stage	.697	.002	.002	.003	.005	.013	.036	.036
	.707	.013	.009	.003	.006	.012	.037	.037
Main stage	.717	.021	.013	.008	.010	.013	.036	.036
	.727	.023	.013	.008	.010	.014	.036	.036
Main stage	.737	.024	.015	.008	.011	.014	.038	.038
	.747	.022	.010	.006	.009	.015	.040	.040
Main stage	.757	.020	.009	.003	.005	.013	.036	.036
	.767	.017	.013	.003	.006	.012	.037	.037
Main stage	.777	.015	.009	.003	.006	.012	.037	.037
	.787	.013	.008	.003	.006	.012	.037	.037
Main stage	.797	.011	.008	.003	.006	.012	.037	.037
	.807	.009	.007	.003	.006	.012	.037	.037
Main stage	.817	.007	.006	.003	.006	.012	.037	.037
	.827	.005	.005	.003	.006	.012	.037	.037
Main stage	.837	.003	.003	.003	.006	.012	.037	.037
	.847	.001	.001	.001	.006	.012	.037	.037
Main stage	.857	.000	.000	.000	.006	.012	.037	.037
	.867	.000	.000	.000	.006	.012	.037	.037
Main stage	.877	.000	.000	.000	.006	.012	.037	.037
	.887	.000	.000	.000	.006	.012	.037	.037
Main stage	.897	.000	.000	.000	.006	.012	.037	.037
	.907	.000	.000	.000	.006	.012	.037	.037
Main stage	.917	.000	.000	.000	.006	.012	.037	.037
	.927	.000	.000	.000	.006	.012	.037	.037
Main stage	.937	.000	.000	.000	.006	.012	.037	.037
	.947	.000	.000	.000	.006	.012	.037	.037
Main stage	.957	.000	.000	.000	.006	.012	.037	.037
	.967	.000	.000	.000	.006	.012	.037	.037
Main stage	.977	.000	.000	.000	.006	.012	.037	.037
	.987	.000	.000	.000	.006	.012	.037	.037
Main stage	.997	.000	.000	.000	.006	.012	.037	.037
	1.007	.000	.000	.000	.006	.012	.037	.037

... - PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(c) $M = 0.86$; $\alpha = -10^\circ$ to 10°

x		C_p for $\beta = 0^\circ$						C_p for $\beta = -10^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
		Main stage						Main stage					
.428	.428	.687	.604	.539	.477	.413	.349	.438	.557	.489	.435	.384	.324
.438	.438	.598	.506	.446	.387	.320	.260	.438	.471	.456	.435	.411	.384
.458	.458	.484	.394	.336	.278	.216	.160	.458	.471	.456	.435	.411	.384
.478	.478	.371	.280	.222	.164	.102	.046	.478	.471	.456	.435	.411	.384
.498	.498	.258	.167	.109	.051	-.007	-.064	.498	.471	.456	.435	.411	.384
.518	.518	.145	.054	-.004	-.062	-.120	-.178	.518	.471	.456	.435	.411	.384
.538	.538	.032	-.059	-.117	-.175	-.233	-.291	.538	.471	.456	.435	.411	.384
.558	.558	-.084	-.171	-.229	-.287	-.345	-.403	.558	.471	.456	.435	.411	.384
.578	.578	-.197	-.284	-.342	-.400	-.458	-.516	.578	.471	.456	.435	.411	.384
.598	.598	-.310	-.397	-.455	-.513	-.571	-.629	.598	.471	.456	.435	.411	.384
.618	.618	-.423	-.510	-.568	-.626	-.684	-.742	.618	.471	.456	.435	.411	.384
.638	.638	-.536	-.623	-.681	-.739	-.797	-.855	.638	.471	.456	.435	.411	.384
.658	.658	-.649	-.736	-.794	-.852	-.910	-.968	.658	.471	.456	.435	.411	.384
.678	.678	-.762	-.849	-.907	-.965	-.1023	-.1081	.678	.471	.456	.435	.411	.384
.698	.698	-.875	-.962	-.1020	-.1078	-.1136	-.1194	.698	.471	.456	.435	.411	.384
.718	.718	-.988	-.1075	-.1133	-.1191	-.1249	-.1307	.718	.471	.456	.435	.411	.384
.738	.738	-.1101	-.1159	-.1217	-.1275	-.1333	-.1391	.738	.471	.456	.435	.411	.384
.758	.758	-.1214	-.1272	-.1330	-.1388	-.1446	-.1504	.758	.471	.456	.435	.411	.384
.778	.778	-.1327	-.1385	-.1443	-.1501	-.1559	-.1617	.778	.471	.456	.435	.411	.384
.798	.798	-.1440	-.1498	-.1556	-.1614	-.1672	-.1730	.798	.471	.456	.435	.411	.384
.818	.818	-.1553	-.1611	-.1669	-.1727	-.1785	-.1843	.818	.471	.456	.435	.411	.384
.838	.838	-.1666	-.1724	-.1782	-.1840	-.1898	-.1956	.838	.471	.456	.435	.411	.384
.858	.858	-.1779	-.1837	-.1895	-.1953	-.2011	-.2069	.858	.471	.456	.435	.411	.384
.878	.878	-.1892	-.1950	-.2008	-.2066	-.2124	-.2182	.878	.471	.456	.435	.411	.384
.898	.898	-.2005	-.2063	-.2121	-.2179	-.2237	-.2295	.898	.471	.456	.435	.411	.384
.918	.918	-.2118	-.2176	-.2234	-.2292	-.2350	-.2408	.918	.471	.456	.435	.411	.384
.938	.938	-.2231	-.2289	-.2347	-.2405	-.2463	-.2521	.938	.471	.456	.435	.411	.384
.958	.958	-.2344	-.2402	-.2460	-.2518	-.2576	-.2634	.958	.471	.456	.435	.411	.384
.978	.978	-.2457	-.2515	-.2573	-.2631	-.2689	-.2747	.978	.471	.456	.435	.411	.384
.998	.998	-.2570	-.2628	-.2686	-.2744	-.2802	-.2860	.998	.471	.456	.435	.411	.384
.428	.428	.687	.604	.539	.477	.413	.349	.428	.438	.457	.489	.435	.384
.438	.438	.598	.506	.446	.387	.320	.260	.438	.438	.457	.489	.435	.384
.458	.458	.484	.394	.336	.278	.216	.160	.458	.438	.457	.489	.435	.384
.478	.478	.371	.280	.222	.164	.102	.046	.478	.438	.457	.489	.435	.384
.498	.498	.258	.167	.109	.051	-.007	-.064	.498	.438	.457	.489	.435	.384
.518	.518	.145	.054	-.004	-.062	-.120	-.178	.518	.438	.457	.489	.435	.384
.538	.538	.032	-.059	-.117	-.175	-.233	-.291	.538	.438	.457	.489	.435	.384
.558	.558	-.084	-.171	-.229	-.287	-.345	-.403	.558	.438	.457	.489	.435	.384
.578	.578	-.197	-.284	-.342	-.400	-.458	-.516	.578	.438	.457	.489	.435	.384
.598	.598	-.310	-.397	-.455	-.513	-.571	-.629	.598	.438	.457	.489	.435	.384
.618	.618	-.423	-.510	-.568	-.626	-.684	-.742	.618	.438	.457	.489	.435	.384
.638	.638	-.536	-.623	-.681	-.739	-.797	-.855	.638	.438	.457	.489	.435	.384
.658	.658	-.649	-.736	-.794	-.852	-.910	-.968	.658	.438	.457	.489	.435	.384
.678	.678	-.762	-.849	-.907	-.965	-.1023	-.1081	.678	.438	.457	.489	.435	.384
.698	.698	-.875	-.962	-.1020	-.1078	-.1136	-.1194	.698	.438	.457	.489	.435	.384
.718	.718	-.988	-.1075	-.1133	-.1191	-.1249	-.1307	.718	.438	.457	.489	.435	.384
.738	.738	-.1101	-.1159	-.1217	-.1275	-.1333	-.1391	.738	.438	.457	.489	.435	.384
.758	.758	-.1214	-.1272	-.1330	-.1388	-.1446	-.1504	.758	.438	.457	.489	.435	.384
.778	.778	-.1327	-.1385	-.1443	-.1501	-.1559	-.1617	.778	.438	.457	.489	.435	.384
.798	.798	-.1440	-.1498	-.1556	-.1614	-.1672	-.1730	.798	.438	.457	.489	.435	.384
.818	.818	-.1553	-.1611	-.1669	-.1727	-.1785	-.1843	.818	.438	.457	.489	.435	.384
.838	.838	-.1666	-.1724	-.1782	-.1840	-.1898	-.1956	.838	.438	.457	.489	.435	.384
.858	.858	-.1779	-.1837	-.1895	-.1953	-.2011	-.2069	.858	.438	.457	.489	.435	.384
.878	.878	-.1892	-.1950	-.2008	-.2066	-.2124	-.2182	.878	.438	.457	.489	.435	.384
.898	.898	-.2005	-.2063	-.2121	-.2179	-.2237	-.2295	.898	.438	.457	.489	.435	.384
.918	.918	-.2118	-.2176	-.2234	-.2292	-.2350	-.2408	.918	.438	.457	.489	.435	.384
.938	.938	-.2231	-.2289	-.2347	-.2405	-.2463	-.2521	.938	.438	.457	.489	.435	.384
.958	.958	-.2344	-.2402	-.2460	-.2518	-.2576	-.2634	.958	.438	.457	.489	.435	.384
.978	.978	-.2457	-.2515	-.2573	-.2631	-.2689	-.2747	.978	.438	.457	.489	.435	.384
.998	.998	-.2570	-.2628	-.2686	-.2744	-.2802	-.2860	.998	.438	.457	.489	.435	.384

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FIGURE 223 - PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(1) $M = 1.06$; $\alpha = -10^\circ$ to 10°

x, z		C_p for $\beta = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	None	.424	.731	.663	.603	.544	.490	.410
	Upper stage	.436	.731	.663	.603	.544	.490	.410
	Transition	.436	.731	.663	.603	.544	.490	.410
	Flare	.436	.731	.663	.603	.544	.490	.410
Main stage	None	.436	.731	.663	.603	.544	.490	.410
	Upper stage	.436	.731	.663	.603	.544	.490	.410
	Transition	.436	.731	.663	.603	.544	.490	.410
	Flare	.436	.731	.663	.603	.544	.490	.410
Main stage	None	.436	.731	.663	.603	.544	.490	.410
	Upper stage	.436	.731	.663	.603	.544	.490	.410
	Transition	.436	.731	.663	.603	.544	.490	.410
	Flare	.436	.731	.663	.603	.544	.490	.410
Main stage	None	.436	.731	.663	.603	.544	.490	.410
	Upper stage	.436	.731	.663	.603	.544	.490	.410
	Transition	.436	.731	.663	.603	.544	.490	.410
	Flare	.436	.731	.663	.603	.544	.490	.410

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(3) $M = .60$; $\alpha = -10^\circ$ to 10° - Concluded

α		C_p for $\beta = -9^\circ$									
		$\beta = -9^\circ$									
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$			
α	Main wing	.428	.532	.586	.610	.606	.586	.564	.493		
	Upper wing	.448	.382	.450	.446	.446	.435	.410	.351		
	Upper wing	.456	.296	.358	.358	.358	.347	.327	.271		
	Upper wing	.471	-.764	-.753	-.756	-.756	-.760	-.767	-.785		
α	Main wing	.491	-.368	-.588	-.548	-.548	-.546	-.534	-.345		
	Upper wing	.511	-.075	.049	.034	.034	.001	.005	-.080		
	Upper wing	.531	.296	.302	.195	.195	.297	.337	.288		
	Upper wing	.552	.148	.757	.301	.283	.281	.231	.125		
α	Main wing	.568	-.768	-.733	-.724	-.718	-.725	-.741	-.774		
	Upper wing	.587	-.539	-.500	-.489	-.409	-.499	-.518	-.551		
	Upper wing	.607	-.405	-.335	-.281	-.275	-.261	-.328	-.404		
	Upper wing	.627	-.252	-.179	-.156	-.171	-.167	-.175	-.252		
α	Main wing	.657	-.193	-.120	-.095	-.064	-.108	-.132	-.194		
	Upper wing	.697	-.144	-.088	-.066	-.062	-.078	-.091	-.145		
	Upper wing	.737	-.128	-.067	-.045	-.039	-.063	-.072	-.124		
	Upper wing	.777	-.109	-.054	-.034	-.026	-.032	-.062	-.112		
α	Main wing	.817	-.080	-.032	-.014	-.014	-.029	-.046	-.086		
	Upper wing	.857	-.043	.002	.014	.014	.014	.014	.014		
	Upper wing	.897	-.042	.003	.022	.026	.010	-.001	-.035		
	Upper wing	.937	-.014	.014	.014	.014	.014	.014	.014		

TABLE 1. - PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Continued

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 0^\circ$							C_p for $\beta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
x/z	None	.428	.438	.448	.458	.467	.476	.483	.438	.448	.458	.467	.476	.483	.491
		.438	.448	.458	.467	.476	.483	.491	.438	.448	.458	.467	.476	.483	.491
	Upper stage	.491	.501	.511	.521	.530	.538	.546	.491	.501	.511	.521	.530	.538	.546
		.501	.511	.521	.530	.538	.546	.554	.501	.511	.521	.530	.538	.546	.554
	Transition	.554	.564	.574	.584	.593	.602	.610	.554	.564	.574	.584	.593	.602	.610
		.564	.574	.584	.593	.602	.610	.618	.564	.574	.584	.593	.602	.610	.618
	Flare	.618	.628	.638	.647	.656	.665	.673	.618	.628	.638	.647	.656	.665	.673
		.628	.638	.647	.656	.665	.673	.681	.628	.638	.647	.656	.665	.673	.681
	Main stage	.733	.743	.753	.762	.771	.780	.788	.733	.743	.753	.762	.771	.780	.788
		.743	.753	.762	.771	.780	.788	.796	.743	.753	.762	.771	.780	.788	.796

TABLE 9.- PRESSURE COEFFICIENTS FOR CONFIGURATION 223 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for - $\beta = -50^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$	
Nose	.438	.665	.643	.614	.580	.543	.448
	.448	.622	.613	.595	.535	.490	.404
	.458	.550	.535	.514	.480	.438	.356
	.471	.419	.393	.390	.404	.428	.452
	.476	.487	.513	.524	.551	.566	.588
Upper stage	.481	.368	.407	.437	.464	.512	.547
	.491	.227	.282	.312	.342	.393	.425
	.501	.167	.204	.231	.258	.303	.260
	.511	.137	.160	.187	.203	.059	.085
	.521	.108	.125	.147	.176	.101	.030
Transition	.531	.378	.355	.336	.255	.196	.131
	.539	.574	.546	.496	.332	.279	.218
	.546	.538	.519	.453	.367	.317	.252
	.552	.390	.415	.426	.381	.330	.234
	.562	.301	.316	.297	.274	.239	.159
Main stage	.568	.391	.379	.361	.389	.413	.449
	.577	.320	.319	.305	.332	.372	.429
	.587	.239	.248	.245	.272	.321	.372
	.597	.184	.188	.193	.207	.244	.329
	.607	.165	.158	.155	.169	.179	.244
	.617	.154	.139	.139	.144	.152	.182
	.627	.154	.128	.115	.125	.138	.160
	.637	.132	.106	.117	.125	.138	.160
	.657	.131	.066	.093	.098	.111	.138
	.677	.115	.057	.044	.049	.076	.113
	.697	.100	.043	.040	.045	.063	.100
	.717	.097	.037	.037	.041	.050	.086
	.737	.085	.032	.031	.032	.052	.064
	.757	.065	.026	.017	.025	.037	.052
	.777	.054	.020	.008	.016	.030	.050
	.785	.056	.011	.016	.018	.033	.048
	.817	.043	.015	.015	.023	.032	.047
	.837	.033	.007	.003	.008	.022	.041
	.857	.029	.009	.001	.001	.016	.031
	.877	.022	.007	.007	.010	.021	.028
	.897	.008	.015	.015	.020	.019	.032
	.917	.008	.015	.015	.020	.019	.032
	.937	.008	.015	.015	.020	.019	.032
	.957	.008	.015	.015	.020	.019	.032
	.977	.008	.015	.015	.020	.019	.032
	.997	.008	.015	.015	.020	.019	.032

TABLE 1. - PRESSURE COEFFICIENTS FOR CONFIGURATION 323

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

		C_p for -					
		$\beta = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/t	.443	.553	.577	.634	.660	.637
		.453	.407	.436	.488	.516	.560
Transition		.463	.203	.734	.308	.346	.393
		.471	-1.366	-661	-545	-583	-692
Upper stage		.476	-558	-471	-403	-409	-490
		.481	-536	-489	-396	-402	-477
Nose		.491	-500	-413	-389	-395	-452
		.501	-016	-259	-353	-379	-401
		.511	-072	-088	-281	-328	-334
		.521	.132	-066	-177	-257	-257
		.531	.241	.179	-048	-153	-161
		.539	-289	-188	-192	-112	-033
		.546	.093	.164	.125	.059	.034
		.552	.015	.090	.129	.096	.081
		.562	-220	-138	-041	-014	-014
		.568	-592	-705	-615	-554	-590
		.577	-187	-188	-163	-169	-298
		.587	-108	-113	-098	-105	-196
		.597	-074	-076	-066	-072	-110
		.607	-063	-055	-052	-055	-067
		.617	-041	-044	-041	-045	-039
		.627	-029	-034	-030	-034	-030
		.637	-029	-026	-023	-028	-023
		.657	-019	-017	-015	-020	-018
		.677	-015	-017	-013	-018	-017
		.697	-007	-009	-009	-014	-015
		.737	-007	-008	-008	-013	-016
		.777	-003	-002	-001	-008	-011
		.785	.001	.006	.004	-002	-005
		.817	.001	.003	.002	-004	-008
		.857	.001	.001	.002	-008	-017
		.877	.001	.000	.001	-008	-017
		.897	.002	.004	.004	-011	-015

		C_p for -					
		$\beta = -5^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/t	.443	.553	.581	.628	.653	.694
		.453	.380	.410	.468	.498	.542
Transition		.463	.207	.238	.308	.343	.390
		.471	-654	-567	-474	-506	-575
Upper stage		.476	-499	-430	-367	-379	-452
		.481	-517	-451	-371	-385	-455
Nose		.491	-421	-426	-378	-389	-445
		.501	.027	.292	-353	-375	-404
		.511	.072	.113	-288	-335	-343
		.521	.151	.127	-199	-267	-273
		.531	.308	.162	-077	-163	-183
		.539	-376	.242	-.051	.022	.128
		.546	-1.030	-.061	.027	.096	.191
		.552	.015	.090	.094	.072	.037
		.562	-.220	-.175	-.045	-.028	-.046
		.568	-.535	-.576	-.439	-.406	-.568
		.577	-.176	-.176	-.156	-.163	-.263
		.587	-.108	-.113	-.102	-.109	-.196
		.597	-.063	-.059	-.048	-.055	-.084
		.607	-.052	-.055	-.052	-.055	-.062
		.617	-.041	-.047	-.041	-.045	-.042
		.627	-.029	-.038	-.030	-.038	-.036
		.637	-.029	-.028	-.023	-.031	-.026
		.657	-.019	-.020	-.018	-.023	-.021
		.677	-.007	-.007	-.008	-.013	-.013
		.697	-.011	-.009	-.009	-.014	-.016
		.737	-.007	-.004	-.008	-.011	-.014
		.777	-.003	-.002	-.001	-.006	-.009
		.785	.001	.006	.004	-.002	-.006
		.817	.001	.003	.002	-.004	-.008
		.857	.002	.001	.003	-.009	-.013
		.877	.004	.004	.002	.010	-.014
		.897	.004	.005	.005	.012	-.016
		.957	-.014	-.016	-.017	-.025	-.029
		.997	-.066	-.074	-.081	-.091	-.104

TABLE 11.- PRESSURE DIFFERENTIALS FOR CONFIGURATION 302 - Continued

(a) $M = 0.40$ to 0.90 ; $\alpha = 0^\circ$ - Concluded

x/t		C_p for -					
		$\beta = -60^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage		.473	.553	.581	.628	.653	.691
		.309	.398	.428	.482	.509	.551
		.463	.212	.242	.308	.346	.390
		.471	.522	.459	.385	.422	.511
Upper stage		.476	.453	.401	.342	.368	.436
		.481	.472	.413	.349	.368	.442
		.491	.417	.405	.367	.379	.439
		.501	.220	.296	.346	.368	.398
Transition		.511	.015	.138	.285	.328	.337
		.521	.104	.008	.202	.267	.270
		.531	.200	.120	.095	.176	.186
		.539	.201	.205	.069	.018	.055
Flare		.546	.093	.155	.147	.079	.040
		.552	.048	.073	.073	.036	.015
		.562	.175	.134	.055	.041	.058
		.568	.595	.576	.396	.379	.417
Nose		.577	.179	.176	.152	.156	.250
		.587	.115	.113	.102	.109	.173
		.597	.074	.071	.070	.075	.116
		.607	.056	.055	.052	.055	.068
Main stage		.617	.041	.042	.041	.045	.046
		.627	.038	.034	.034	.038	.036
		.637	.028	.026	.027	.031	.030
		.657	.019	.018	.018	.023	.021
Upper stage		.677	.013	.013	.013	.019	.017
		.697	.009	.008	.008	.014	.014
		.737	.006	.005	.005	.011	.014
		.777	.003	.000	.000	.007	.010
Transition		.745	.001	.000	.000	.006	.009
		.817	.001	.003	.002	.004	.007
		.857	.001	.001	.003	.009	.013
		.877	.002	.002	.003	.010	.014
Flare		.897	.002	.004	.004	.011	.015
		.917	.007	.008	.009	.016	.020
		.957	.014	.015	.018	.024	.029
		.997	.068	.075	.081	.092	.104
Main stage		.443	.557	.577	.628	.650	.691
		.463	.207	.242	.304	.343	.390
		.471	.531	.447	.417	.432	.562
		.491	.412	.405	.367	.385	.439
Upper stage		.511	.015	.142	.288	.328	.340
		.531	.214	.133	.095	.183	.186
		.539	.053	.073	.080	.052	.031
		.568	.718	.651	.464	.409	.500
Transition		.587	.115	.113	.102	.109	.196
		.607	.056	.055	.052	.055	.065
		.627	.038	.034	.034	.038	.036
		.657	.023	.018	.019	.024	.022
Main stage		.697	.011	.011	.010	.017	.017
		.737	.007	.005	.005	.011	.013
		.777	.003	.000	.005	.007	.010
		.785	.003	.000	.001	.007	.010
Upper stage		.817	.004	.005	.004	.002	.006
		.857	.001	.001	.001	.009	.012
		.897	.004	.003	.005	.012	.016
		.997	.003	.004	.005	.012	.016

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 203 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$																																																																																																																																																																																																																																																																																																																																																																																																	
x/l										x/l																																																																																																																																																																																																																																																																																																																																																																																																	
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		$\alpha = -10^\circ$		$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$																																																																																																																																																																																																																																																																																																																																																																																											
.443	Nozzle	.737	.655	.601	.527	.456	.385	.292		.568	Main stage	-.583	-.633	-.631	-.565	-.490	-.505	-.551																																																																																																																																																																																																																																																																																																																																																																																									
		.582	.494	.435	.372	.306	.247	.159				.349	.262	.202	.150	.107	.058	.004		-1.240	-1.290	-1.204	-.080	-.092	-.081	-.551		.463	Upper stage	.554	.758	.803	.720	.604	.585	.459		.532	Transition	-.135	-.086	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.476	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.481	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.491	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.501	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																									
		.349	.262	.202	.150	.107	.058	.004				-1.240	-1.290	-1.204	-.080	-.092	-.081	-.551		.463	Upper stage	.554	.758	.803	.720	.604	.585			.459		.532	Transition	-.135	-.086	-.203	-.211			-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.476	Main stage	.554	.758			.803	.720	.604	.585	.459		.562	Main stage			-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.481	Upper stage	.554	.758	.803	.720	.604	.585			.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.491	Main stage	.554	.758			.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.501	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720			.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459	
		-1.240	-1.290	-1.204	-.080	-.092	-.081	-.551																																																																																																																																																																																																																																																																																																																																																																																																			
.463	Upper stage	.554	.758	.803	.720	.604	.585	.459		.532	Transition	-.135	-.086	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.476	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.481	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758			.803	.720	.604	.585	.459		.491	Main stage	.554	.758			.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758			.803	.720	.604	.585	.459		.501	Upper stage	.554	.758			.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.511	Main stage	.554	.758			.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.521	Upper stage	.554	.758			.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459		.531	Main stage	.554	.758			.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720			.604	.585	.459																																						
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.476	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.481	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.491	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.501	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.476	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.481	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.491	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.501	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.511	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																					
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.481	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.491	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.501	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																															
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.481	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.491	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.501	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.511	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																				
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.491	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.501	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																																																																														
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.491	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.501	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.511	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																			
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.501	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																													
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.501	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.511	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																		
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.511	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																												
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.511	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage			.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																	
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.521	Upper stage	.554	.758	.803	.720	.604	.585	.459				.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																											
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.521	Upper stage	.554	.758	.803	.720	.604	.585	.459		.562	Transition	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage			.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459		.531	Main stage	.554	.758	.803	.720	.604	.585	.459				.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259	.554			.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																										
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			
.531	Main stage	.554	.758	.803	.720	.604	.585	.459		.562	Main stage	-.120	-.170	-.203	-.211	-.216	-.226	-.259																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																															
		.554	.758	.803	.720	.604	.585	.459				.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																									
		.554	.758	.803	.720	.604	.585	.459																																																																																																																																																																																																																																																																																																																																																																																																			

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 303 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						
		$\beta = -5^\circ$						
	x/l	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage		.443	.438	.518	.521	.506	.490	.420
		.453	.405	.158	.150	.134	.125	.076
		.471	.471	.728	.702	.803	.892	.948
		.481	.477	.249	.257	.227	.180	.196
Upper stage		.491	.477	.249	.257	.227	.180	.196
		.501	.477	.249	.257	.227	.180	.196
		.511	.477	.249	.257	.227	.180	.196
		.521	.477	.249	.257	.227	.180	.196
Transition		.531	.477	.249	.257	.227	.180	.196
		.539	.477	.249	.257	.227	.180	.196
		.546	.477	.249	.257	.227	.180	.196
		.552	.477	.249	.257	.227	.180	.196
Nozzle		.562	.477	.249	.257	.227	.180	.196
		.568	.477	.249	.257	.227	.180	.196
		.577	.477	.249	.257	.227	.180	.196
		.587	.477	.249	.257	.227	.180	.196

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 323 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$									
$x/2$										$x/2$									
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		$\alpha = -10^\circ$		$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$			
Nose	.443	.814	.732	.673	.604	.539	.465	.366	.443	.773	.713	.666	.600	.539	.473	.373			
	.453	.661	.579	.524	.462	.393	.324	.235	.453	.599	.536	.492	.438	.384	.320	.231			
	.463	.452	.374	.330	.276	.222	.163	.082	.426	.359	.319	.276	.229	.167	.090				
	.471	.180	.133	.075	.020	.000	.000	.000	.1043	.062	.038	.020	.020	.020	.020				
Upper stage	.476	.707	.659	.623	.581	.535	.481	.435	.476	.491	.458	.424	.390	.356	.322	.288			
	.481	.611	.564	.527	.481	.435	.381	.335	.491	.458	.424	.390	.356	.322	.288				
	.491	.311	.264	.218	.172	.126	.080	.034	.491	.458	.424	.390	.356	.322	.288				
	.501	.067	.020	.000	.000	.000	.000	.000	.501	.467	.433	.399	.365	.331	.297				
Transition	.511	.132	.120	.118	.116	.114	.112	.110	.511	.477	.443	.409	.375	.341	.307				
	.521	.243	.228	.216	.204	.192	.180	.168	.521	.487	.453	.419	.385	.351	.317				
	.531	.509	.491	.473	.455	.437	.419	.401	.531	.497	.463	.429	.395	.361	.327				
	.539	.199	.172	.148	.124	.100	.076	.052	.539	.505	.471	.437	.403	.369	.335				
Flare	.546	.308	.262	.216	.170	.124	.078	.032	.546	.512	.478	.444	.410	.376	.342				
	.552	.221	.175	.161	.118	.075	.032	.000	.552	.518	.484	.450	.416	.382	.348				
	.562	.001	.000	.000	.000	.000	.000	.000	.562	.528	.494	.460	.426	.392	.358				
	.568	.214	.210	.206	.202	.198	.194	.190	.568	.534	.500	.466	.432	.398	.364				
Main stage	.568	.1218	.1218	.1171	.1069	.0917	.0744	.0555	.568	.1064	.1084	.1017	.0946	.0864	.0773	.715			
	.577	.145	.169	.182	.177	.167	.155	.154	.577	.183	.184	.182	.182	.184	.170	.184			
	.587	.076	.092	.102	.107	.114	.105	.096	.587	.087	.092	.106	.111	.114	.116	.119			
	.597	.041	.061	.067	.073	.083	.074	.065	.597	.045	.045	.048	.057	.064	.059	.061			
	.607	.026	.042	.048	.054	.064	.055	.046	.607	.045	.045	.048	.054	.064	.062	.065			
	.617	.014	.036	.036	.046	.048	.039	.034	.617	.033	.034	.036	.046	.048	.048	.050			
	.627	.003	.019	.029	.034	.041	.032	.027	.627	.030	.030	.029	.034	.041	.039	.042			
	.637	.008	.011	.027	.034	.041	.032	.027	.637	.018	.022	.021	.027	.033	.028	.034			
	.647	.020	.002	.009	.018	.021	.015	.009	.647	.011	.014	.016	.021	.024	.024	.027			
	.657	.021	.002	.006	.016	.018	.010	.008	.657	.003	.000	.002	.010	.013	.012	.017			
	.667	.027	.007	.000	.012	.013	.006	.006	.667	.002	.000	.000	.012	.014	.013	.020			
	.677	.035	.009	.000	.013	.010	.005	.009	.677	.002	.000	.002	.007	.010	.009	.021			
	.687	.045	.015	.004	.003	.006	.001	.008	.687	.004	.008	.008	.005	.005	.004	.017			
	.697	.055	.020	.012	.002	.001	.004	.001	.697	.011	.008	.007	.004	.000	.003	.023			
	.707	.065	.029	.010	.000	.002	.002	.007	.707	.004	.002	.002	.004	.007	.006	.027			
	.717	.075	.039	.006	.003	.005	.003	.015	.717	.003	.001	.002	.005	.007	.007	.027			
.727	.085	.049	.007	.004	.004	.003	.015	.727	.001	.000	.000	.007	.007	.009	.029				
.737	.095	.059	.008	.005	.004	.003	.015	.737	.000	.000	.000	.007	.007	.011	.032				
.747	.105	.069	.009	.006	.006	.006	.020	.747	.000	.000	.000	.007	.007	.025	.045				
.757	.115	.079	.010	.007	.006	.006	.020	.757	.000	.000	.000	.007	.007	.025	.045				
.767	.125	.089	.011	.008	.006	.006	.020	.767	.000	.000	.000	.007	.007	.025	.045				
.777	.135	.099	.012	.009	.006	.006	.020	.777	.000	.000	.000	.007	.007	.025	.045				
.787	.145	.109	.013	.010	.006	.006	.020	.787	.000	.000	.000	.007	.007	.025	.045				
.797	.155	.119	.014	.011	.006	.006	.020	.797	.000	.000	.000	.007	.007	.025	.045				
.807	.165	.129	.015	.012	.006	.006	.020	.807	.000	.000	.000	.007	.007	.025	.045				
.817	.175	.139	.016	.013	.006	.006	.020	.817	.000	.000	.000	.007	.007	.025	.045				
.827	.185	.149	.017	.014	.006	.006	.020	.827	.000	.000	.000	.007	.007	.025	.045				
.837	.195	.159	.018	.015	.006	.006	.020	.837	.000	.000	.000	.007	.007	.025	.045				
.847	.205	.169	.019	.016	.006	.006	.020	.847	.000	.000	.000	.007	.007	.025	.045				
.857	.215	.179	.020	.017	.006	.006	.020	.857	.000	.000	.000	.007	.007	.025	.045				
.867	.225	.189	.021	.018	.006	.006	.020	.867	.000	.000	.000	.007	.007	.025	.045				
.877	.235	.199	.022	.019	.006	.006	.020	.877	.000	.000	.000	.007	.007	.025	.045				
.887	.245	.209	.023	.020	.006	.006	.020	.887	.000	.000	.000	.007	.007	.025	.045				
.897	.255	.219	.024	.021	.006	.006	.020	.897	.000	.000	.000	.007	.007	.025	.045				

TABLE 1.- PRESSURE COEFFICIENTS FOR CONFIGURATION 323 - Continued

(c) $M = 0.86$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for $\beta = -60^\circ$										C_p for $\beta = -90^\circ$									
$x/1$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$x/1$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$				
Nose	.443	.657	.640	.600	.561	.503	.407	Nose	.443	.516	.602	.600	.587	.562	.493				
	.453	.516	.490	.455	.416	.361	.276		.463	.210	.270	.276	.259	.234	.187				
	.463	.322	.300	.276	.240	.193	.112		.471	.654	.554	.460	.524	.618	.655				
	.471	.807	.800	.815	.821	.866	.895		.491	.487	.425	.377	.429	.470	.488				
Upper stage	.476	.660	.599	.502	.387	.439	.473	Upper stage	.491	.487	.425	.377	.429	.470	.488				
	.481	.614	.584	.481	.402	.448	.473		.511	.087	.163	.238	.202	.116	.130				
	.491	.345	.445	.380	.352	.370	.400		.531	.255	.141	.068	.121	.222	.216				
	.501	.049	.176	.334	.352	.402	.473												
Flare	.511	.032	.094	.119	.121	.062	.084	Flare	.552	.010	.076	.112	.104	.060	.030				
	.521	.132	.071	.004	.013	.076	.073		.568	.1249	.056	.054	.064	.076	.142				
	.531	.355	.210	.148	.081	.060	.023		.587	.187	.130	.117	.111	.135	.196				
	.539	.334	.297	.171	.093	.062	.023		.607	.133	.080	.056	.054	.064	.078				
Transition	.544	.280	.263	.171	.093	.062	.023	Transition	.627	.122	.057	.036	.041	.059	.123				
	.552	.084	.131	.084	.070	.037	.050		.657	.110	.049	.024	.028	.050	.113				
	.562	.111	.113	.092	.125	.182	.246		.697	.100	.039	.014	.024	.039	.101				
	.568	.126	.075	.073	.079	.085	.127		.737	.089	.033	.007	.011	.031	.090				
Main stage	.577	.104	.044	.046	.048	.047	.088	Main stage	.777	.083	.029	.003	.007	.026	.085				
	.587	.122	.113	.111	.117	.124	.157		.817	.089	.031	.005	.001	.019	.071				
	.597	.156	.084	.073	.079	.085	.127		.857	.075	.023	.003	.008	.024	.074				
	.607	.107	.056	.054	.064	.059	.096		.897	.075	.023	.003	.008	.027	.076				
Main stage	.617	.099	.057	.044	.048	.047	.088	Main stage	.907	.075	.028	.006	.011	.027	.076				
	.627	.091	.036	.038	.041	.043	.080												
	.637	.080	.029	.031	.033	.043	.080												
	.657	.074	.020	.023	.024	.035	.071												
Main stage	.677	.061	.013	.016	.020	.030	.063	Main stage	.937	.100	.039	.013	.024	.039	.101				
	.697	.048	.006	.010	.016	.024	.056		.957	.089	.033	.007	.011	.031	.090				
	.717	.038	.006	.007	.010	.019	.046		.977	.083	.029	.003	.007	.026	.085				
	.737	.060	.020	.003	.006	.013	.035		.997	.089	.031	.005	.001	.003	.019				
Main stage	.757	.059	.020	.003	.005	.010	.032	Main stage	.997	.070	.018	.001	.003	.019	.071				
	.777	.045	.011	.003	.003	.009	.030												
	.787	.045	.011	.003	.003	.009	.030												
	.797	.050	.018	.004	.007	.011	.030												
Main stage	.817	.050	.018	.004	.007	.011	.030	Main stage	.997	.075	.023	.003	.008	.024	.074				
	.827	.050	.017	.002	.005	.008	.032												
	.837	.054	.017	.003	.006	.009	.032												
	.847	.059	.025	.010	.011	.014	.036												
Main stage	.867	.064	.032	.016	.023	.028	.047	Main stage	.997	.075	.028	.006	.011	.027	.076				
	.877	.064	.032	.016	.023	.028	.047												
	.887	.064	.032	.016	.023	.028	.047												
	.897	.064	.032	.016	.023	.028	.047												
Main stage	.907	.064	.032	.016	.023	.028	.047	Main stage	.997	.075	.028	.006	.011	.027	.076				
	.917	.064	.032	.016	.023	.028	.047												
	.927	.064	.032	.016	.023	.028	.047												
	.937	.064	.032	.016	.023	.028	.047												

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 323 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10°

		C_p for $\beta = 0^\circ$						C_p for $\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/l	.941	.865	.813	.743	.676	.517	.443	.795	.737	.679	.620	.523
		.811	.732	.671	.612	.546	.399	.453	.647	.595	.541	.485	.400
Transition	x/l	.636	.563	.508	.455	.400	.350	.463	.499	.452	.403	.350	.277
		.471	.412	.356	.298	.245	.193	.471	.493	.450	.403	.350	.277
Flare	x/l	.833	.752	.686	.625	.565	.512	.476	.662	.606	.550	.493	.400
		.604	.521	.454	.394	.339	.286	.481	.584	.528	.471	.414	.329
Nose	x/l	.326	.247	.184	.124	.064	.004	.311	.471	.406	.340	.274	.189
		.136	.059	.004	.059	.119	.179	.155	.264	.203	.146	.089	.023
Main stage	x/l	.044	.009	.036	.064	.092	.119	.008	.031	.057	.082	.107	.133
		.295	.236	.189	.136	.084	.032	.258	.202	.146	.090	.034	.000
Transition	x/l	.582	.476	.392	.316	.245	.179	.546	.452	.367	.282	.207	.133
		.400	.345	.292	.240	.188	.136	.330	.255	.180	.105	.030	.000
Flare	x/l	.456	.415	.379	.346	.312	.278	.546	.452	.367	.282	.207	.133
		.293	.246	.204	.172	.140	.108	.562	.452	.367	.282	.207	.133
Nose	x/l	.662	.582	.500	.425	.357	.292	.568	.470	.385	.300	.215	.130
		.424	.349	.278	.211	.144	.077	.577	.469	.385	.300	.215	.130
Main stage	x/l	.320	.241	.166	.091	.016	.000	.587	.480	.395	.310	.225	.140
		.188	.109	.034	.000	.000	.000	.597	.480	.395	.310	.225	.140
Transition	x/l	.170	.091	.016	.000	.000	.000	.607	.480	.395	.310	.225	.140
		.067	.016	.000	.000	.000	.000	.617	.480	.395	.310	.225	.140
Flare	x/l	.627	.547	.467	.387	.307	.227	.677	.570	.485	.395	.310	.225
		.442	.362	.282	.202	.122	.042	.677	.570	.485	.395	.310	.225
Nose	x/l	.131	.051	.000	.000	.000	.000	.677	.570	.485	.395	.310	.225
		.057	.000	.000	.000	.000	.000	.677	.570	.485	.395	.310	.225
Main stage	x/l	.045	.000	.000	.000	.000	.000	.677	.570	.485	.395	.310	.225
		.030	.000	.000	.000	.000	.000	.677	.570	.485	.395	.310	.225
Transition	x/l	.777	.677	.577	.477	.377	.277	.777	.677	.577	.477	.377	.277
		.585	.485	.385	.285	.185	.085	.777	.677	.577	.477	.377	.277
Flare	x/l	.817	.717	.617	.517	.417	.317	.817	.717	.617	.517	.417	.317
		.655	.555	.455	.355	.255	.155	.817	.717	.617	.517	.417	.317
Nose	x/l	.877	.777	.677	.577	.477	.377	.877	.777	.677	.577	.477	.377
		.697	.597	.497	.397	.297	.197	.877	.777	.677	.577	.477	.377

TABLE 10. - PRESSURE COEFFICIENTS FOR CONFIGURATION 303 - Continued

(d) $M = 1.0$; $\alpha = -1.0^\circ$ to 10° - (inches/sq)

x/l		C_p for - $\beta = -60^\circ$						C_p for - $\beta = -90^\circ$							
		α						α							
		-10°	-6°	-3°	0°	3°	6°	-10°	-6°	-3°	0°	3°	6°	10°	
Main stage	Transition	.568	.720	.706	.671	.630	.574	.568	.775	.744	.727	.711	.700	.743	.784
	Flare	.577	.586	.591	.590	.587	.587	.587	.546	.514	.461	.396	.364	.514	.567
	Upper stage	.597	.448	.465	.474	.405	.284	.587	.546	.514	.461	.396	.364	.514	.567
	Rose	.607	.326	.316	.269	.231	.211	.607	.424	.267	.229	.243	.220	.254	.430
Main stage	Transition	.617	.307	.245	.192	.188	.186	.607	.424	.267	.229	.243	.220	.254	.430
	Flare	.627	.301	.187	.159	.157	.162	.627	.237	.172	.156	.157	.156	.162	.228
	Upper stage	.637	.243	.150	.125	.133	.141	.627	.237	.172	.156	.157	.156	.162	.228
	Rose	.657	.180	.123	.098	.110	.110	.657	.208	.138	.104	.101	.110	.138	.206
Main stage	Transition	.677	.150	.085	.082	.093	.076	.657	.208	.138	.104	.101	.110	.138	.206
	Flare	.697	.120	.067	.070	.070	.076	.697	.167	.109	.074	.072	.080	.108	.166
	Upper stage	.737	.109	.083	.059	.055	.055	.737	.129	.091	.049	.058	.080	.108	.166
	Rose	.777	.069	.034	.007	.040	.005	.777	.129	.091	.049	.058	.080	.108	.166
Main stage	Transition	.785	.072	.021	.014	.030	.014	.777	.107	.033	.004	.042	.013	.047	.100
	Flare	.817	.029	.004	.028	.026	.025	.785	.107	.029	.009	.031	.010	.024	.084
	Upper stage	.857	.024	.007	.023	.022	.022	.817	.059	.010	.026	.027	.021	.001	.042
	Rose	.877	.021	.007	.022	.020	.020	.857	.046	.004	.022	.027	.027	.002	.044
Main stage	Transition	.897	.024	.004	.019	.027	.016	.897	.050	.006	.016	.026	.015	.005	.047
	Flare	.917	.033	.002	.014	.011	.004	.897	.050	.006	.016	.026	.015	.005	.047
	Upper stage	.957	.036	.007	.008	.002	.002	.897	.050	.006	.016	.026	.015	.005	.047
	Rose	.997	.107	.089	.085	.100	.118	.897	.050	.006	.016	.026	.015	.005	.047

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 323 - Continued

		C_p for -						
		$\beta = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
x/l								
Nose								
Upper stage								
Transition								
Main stage								

		C_p for -						
		$\beta = -30^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
x/l								
Nose								
Upper stage								
Transition								
Main stage								

TABLE 10.- PRESSURE COEFFICIENTS FOR CONFIGURATION 323 - Concluded

(e) $M = 1.20$, $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						
		$\beta = -60^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	x/z	.919	.915	.900	.869	.829	.779	.684
	.443	.809	.801	.779	.750	.719	.671	.581
	.453	.877	.869	.855	.826	.795	.755	.678
	.463	.946	.938	.924	.895	.864	.824	.747
	.471	.976	.968	.954	.925	.894	.854	.777
Upper stage	x/z	.578	.574	.559	.528	.497	.466	.401
	.476	.548	.544	.529	.498	.467	.436	.371
	.481	.581	.577	.562	.531	.500	.469	.404
	.491	.614	.610	.595	.564	.533	.502	.437
	.501	.647	.643	.628	.597	.566	.535	.470
Transition	x/z	.511	.507	.492	.461	.430	.399	.334
	.511	.544	.540	.525	.494	.463	.432	.367
	.521	.577	.573	.558	.527	.496	.465	.400
	.531	.610	.606	.591	.560	.529	.498	.433
	.541	.643	.639	.624	.593	.562	.531	.466
Flare	x/z	.539	.535	.520	.489	.458	.427	.362
	.539	.572	.568	.553	.522	.491	.460	.395
	.546	.605	.601	.586	.555	.524	.493	.428
	.552	.638	.634	.619	.588	.557	.526	.461
	.562	.671	.667	.652	.621	.590	.559	.494
Main stage	x/z	.393	.389	.374	.343	.312	.281	.216
	.568	.426	.422	.407	.376	.345	.314	.249
	.577	.459	.455	.440	.409	.378	.347	.282
	.587	.492	.488	.473	.442	.411	.380	.315
	.597	.525	.521	.506	.475	.444	.413	.348
Main stage	x/z	.607	.603	.588	.557	.526	.495	.430
	.617	.640	.636	.621	.590	.559	.528	.463
	.627	.673	.669	.654	.623	.592	.561	.496
	.637	.706	.702	.687	.656	.625	.594	.529
	.647	.739	.735	.720	.689	.658	.627	.562
Main stage	x/z	.657	.653	.638	.607	.576	.545	.480
	.667	.771	.767	.752	.721	.690	.659	.594
	.677	.804	.800	.785	.754	.723	.692	.627
	.687	.837	.833	.818	.787	.756	.725	.660
	.697	.870	.866	.851	.820	.789	.758	.693
Main stage	x/z	.707	.703	.688	.657	.626	.595	.530
	.717	.883	.879	.864	.833	.802	.771	.706
	.727	.916	.912	.897	.866	.835	.804	.739
	.737	.949	.945	.930	.899	.868	.837	.772
	.747	.982	.978	.963	.932	.901	.870	.805
Main stage	x/z	.757	.753	.738	.707	.676	.645	.580
	.767	.995	.991	.976	.945	.914	.883	.818
	.777	1.028	1.024	1.009	.978	.947	.916	.851
	.787	1.061	1.057	1.042	1.011	.980	.949	.884
	.797	1.094	1.090	1.075	1.044	.1013	.1012	.947
Main stage	x/z	.807	.803	.788	.757	.726	.695	.630
	.817	1.127	1.123	1.108	1.077	.1046	.1045	.980
	.827	1.160	1.156	1.141	1.110	.1075	.1074	1.003
	.837	1.193	1.189	1.174	1.143	.1104	.1103	1.036
	.847	1.226	1.222	1.207	1.176	.1133	.1132	1.069
Main stage	x/z	.857	.853	.838	.807	.776	.745	.680
	.867	1.259	1.255	1.240	1.209	.1162	.1161	1.104
	.877	1.292	1.288	1.273	1.242	.1191	.1190	1.137
	.887	1.325	1.321	1.306	1.275	.1220	.1219	1.170
	.897	1.358	1.354	1.339	1.308	.1249	.1248	1.203
Main stage	x/z	.907	.903	.888	.857	.826	.795	.730
	.917	1.391	1.387	1.372	1.341	.1278	.1277	1.236
	.927	1.424	1.420	1.405	1.374	.1307	.1306	1.269
	.937	1.457	1.453	1.438	1.407	.1336	.1335	1.302
	.947	1.490	1.486	1.471	1.440	.1365	.1364	1.335
Main stage	x/z	.957	.953	.938	.907	.876	.845	.780
	.967	1.523	1.519	1.504	1.473	.1394	.1393	1.368
	.977	1.556	1.552	1.537	1.506	.1423	.1422	1.401
	.987	1.589	1.585	1.570	1.539	.1452	.1451	1.434
	.997	1.622	1.618	1.603	1.572	.1481	.1480	1.467

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

		C_p for -					
		$\beta = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/l	.428	.223	.263	.274	.301	.329
		.438	.190	.230	.247	.271	.301
Transition Flare	x/l	.448	.157	.185	.205	.232	.266
		.468	.057	.080	.113	.152	.194
Upper stage	x/l	.478	.032	.016	.029	.079	.134
		.483	.167	.166	.142	.003	.071
Nose	x/l	.489	.788	.144	.989	.843	.711
		.494	.203	.250	.449	.413	.348
Upper stage	x/l	.499	.089	.112	.308	.308	.234
		.509	.003	.004	.032	.109	.131
Upper stage	x/l	.519	.060	.102	.132	.103	.022
		.529	.139	.180	.237	.246	.165
Upper stage	x/l	.539	.276	.333	.364	.355	.282
		.549	.447	.482	.513	.475	.385
Transition Flare	x/l	.554	.014	.027	.022	.034	.031
		.558	.204	.314	.391	.420	.421
Main stage	x/l	.568	.182	.912	.1477	.1295	.117
		.577	.271	.743	.143	.977	.773
Main stage	x/l	.587	.146	.324	.300	.755	.575
		.597	.100	.138	.057	.229	.448
Main stage	x/l	.607	.077	.075	.035	.024	.390
		.617	.054	.054	.039	.016	.341
Main stage	x/l	.627	.043	.041	.039	.016	.286
		.637	.043	.033	.035	.012	.202
Main stage	x/l	.657	.021	.022	.031	.003	.005
		.677	.021	.019	.028	.010	.031
Main stage	x/l	.697	.013	.013	.026	.012	.079
		.737	.009	.010	.025	.016	.011
Main stage	x/l	.777	.005	.007	.017	.010	.004
		.785	.001	.000	.012	.004	.000
Main stage	x/l	.817	.000	.004	.014	.006	.003
		.857	.001	.005	.017	.011	.011
Main stage	x/l	.877	.001	.006	.017	.011	.011
		.897	.004	.007	.020	.014	.015

		C_p for -					
		$\beta = -50^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Main stage	x/l	.223	.251	.255	.275	.301	.329
		.190	.215	.222	.240	.265	.295
Transition Flare	x/l	.157	.175	.181	.205	.232	.263
		.057	.076	.083	.110	.145	.188
Upper stage	x/l	.043	.028	.020	.029	.076	.134
		.167	.170	.146	.064	.004	.085
Nose	x/l	.489	.698	.146	.906	.772	.641
		.494	.214	.354	.478	.413	.319
Upper stage	x/l	.499	.089	.151	.333	.338	.270
		.509	.003	.018	.046	.096	.016
Upper stage	x/l	.519	.060	.107	.136	.239	.155
		.529	.180	.200	.237	.345	.272
Upper stage	x/l	.539	.333	.343	.361	.468	.382
		.549	.447	.467	.502	.447	.389
Transition Flare	x/l	.554	.395	.483	.466	.447	.408
		.558	.238	.371	.412	.431	.408
Main stage	x/l	.568	.182	.932	.1495	.1305	.123
		.577	.271	.667	.1114	.974	.734
Main stage	x/l	.587	.146	.292	.304	.741	.565
		.597	.077	.098	.042	.171	.364
Main stage	x/l	.607	.077	.065	.035	.021	.400
		.617	.054	.050	.039	.016	.345
Main stage	x/l	.627	.043	.042	.039	.012	.289
		.637	.043	.028	.035	.009	.195
Main stage	x/l	.657	.025	.023	.034	.005	.003
		.677	.013	.010	.023	.003	.035
Main stage	x/l	.697	.013	.013	.026	.012	.029
		.737	.009	.010	.022	.012	.014
Main stage	x/l	.777	.005	.005	.015	.006	.007
		.785	.001	.000	.012	.004	.010
Main stage	x/l	.817	.000	.002	.014	.006	.004
		.857	.003	.006	.018	.012	.012
Main stage	x/l	.877	.004	.007	.018	.013	.014
		.897	.006	.009	.021	.015	.016
Main stage	x/l	.917	.006	.010	.021	.015	.017
		.957	.016	.023	.034	.026	.029
Main stage	x/l	.997	.072	.080	.093	.092	.110

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 12+ - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Concluded

x/l		C_p for -						x/l		C_p for -					
		$\beta = -60^\circ$								$\beta = -90^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$			$M = 0.40$	$M = 0.70$	$M = 0.75$	$M = 0.85$	$M = 0.90$	$M = 0.95$
Nose	.428	.223	.247	.255	.275	.298	.329	Nose	.418	.267	.287	.300	.314	.338	.367
	.438	.190	.211	.218	.240	.265	.295		.448	.157	.170	.173	.194	.222	.257
	.448	.157	.175	.177	.201	.232	.263		.468	.057	.076	.083	.113	.145	.191
	.468	.043	.071	.079	.110	.145	.188		.483	-.178	-.189	-.171	-.085	-.027	.046
Upper stage	.483	.077	.088	.020	.029	.073	.131	Upper stage	.489	-.653	-.956	-1.012	-.802	-.677	-.557
	.489	-.143	-.104	-.091	-.096	-.092	.110		.509	.003	.004	.018	.001	-.092	-.124
	.494	-.203	-.283	-.354	-.456	-.362	.284		.529	.139	.190	.200	.237	.260	.187
	.499	-.089	-.112	-.151	-.377	-.335	.265		.549	.447	.495	.504	.528	.499	.421
Upper stage	.509	.003	.004	.018	-.046	-.154	.160	Upper stage	.558	.238	.346	.359	.401	.437	.443
	.519	.060	.088	.102	.143	.096	.006		.568	-.1011	-.830	-.869	-1.517	-1.329	-1.149
	.529	.139	.190	.204	.245	.250	.158		.587	-.134	-.371	-.392	-.322	-.786	-.620
	.539	.276	.333	.343	.361	.352	.272		.607	-.066	-.065	-.079	-.042	-.014	-.416
Transition Flare	.549	.447	.477	.487	.492	.451	.363	Transition Flare	.627	-.043	-.033	-.037	-.042	.019	-.273
	.554	.406	.488	.492	.491	.491	.440		.657	-.025	-.021	-.022	-.032	-.004	.013
	.558	-.635	-.093	.030	.180	.249	.315		.697	-.013	-.015	-.016	-.027	-.014	.032
	.562	.025	.155	.188	.273	.309	.347		.737	-.009	-.010	-.010	-.021	-.012	.017
Main stage	.568	-1.023	-.848	-.886	-1.499	-1.309	-1.126	Main stage	.777	-.005	-.008	-.007	-.017	-.009	.006
	.577	-.339	-.686	-.713	-1.103	-.909	-.672		.785	-.005	-.005	-.007	-.017	-.009	.006
	.587	-.134	-.343	-.383	-.268	-.752	-.581		.817	-.000	-.001	-.003	-.014	-.006	-.005
	.597	-.077	-.135	-.164	-.061	-.243	-.500		.857	-.004	-.007	-.009	-.019	-.012	-.013
Main stage	.607	-.066	-.065	-.079	-.039	-.024	-.416	Main stage	.897	-.004	-.007	-.009	-.020	-.013	.015
	.617	.054	-.042	-.050	-.042	.016	-.345		.917	-.009	-.012	-.015	-.025	-.026	.029
	.627	-.043	-.037	-.041	-.042	.012	-.283		.957	-.016	-.021	-.023	-.034	-.029	-.111
	.637	-.043	-.028	-.033	-.039	.009	-.189		.997	-.072	-.082	-.084	-.094	-.092	-.111
Main stage	.657	.025	-.020	-.022	-.032	-.004	.007	Main stage							
	.677	-.017	-.015	-.018	-.028	-.008	.020								
	.697	-.009	-.011	-.013	-.025	-.011	.032								
	.737	-.009	-.008	-.010	-.021	-.012	.017								
Main stage	.777	-.005	-.008	-.007	-.017	-.009	.006	Main stage							
	.785	-.005	-.005	-.007	-.015	-.008	.006								
	.817	.000	-.001	-.003	-.014	-.006	-.002								
	.857	-.003	-.006	-.008	-.018	-.011	-.012								
Main stage	.877	-.004	-.007	-.009	-.019	-.012	.013	Main stage							
	.897	-.004	-.007	-.009	-.020	-.013	.015								
	.917	-.009	-.012	-.015	-.025	-.019	.020								
	.957	-.016	-.021	-.023	-.034	-.026	.029								
Main stage	.997	-.072	-.082	-.084	-.094	-.092	-.111	Main stage							

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 12A - Continued

(d) $M = 0.60$; $\alpha = -10^\circ$ to 10°

x/z		C_p for -						
		$\beta = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Rose	.428	.414	.338	.286	.242	.188	.145	.092
	.438	.380	.310	.247	.208	.154	.117	.064
	.448	.341	.265	.213	.169	.121	.078	.025
	.458	.240	.164	.112	.073	.020	-.018	-.067
	.468	.133	.063	.005	-.034	-.083	-.116	-.158
Upper stage	.478	.002	-.074	-.138	-.172	-.215	-.242	-.278
	.488	.765	-.837	-.924	-.935	-.968	-.971	-.967
	.494	-.123	-.173	-.214	-.202	-.240	-.250	-.285
	.509	-.030	-.063	-.093	-.098	-.107	-.111	-.102
	.519	.057	.030	.006	.012	.003	.001	.008
Transition	.529	.120	.099	.076	.081	.078	.081	.089
	.539	.201	.186	.162	.168	.165	.162	.165
	.549	.364	.337	.319	.313	.299	.283	.263
	.554	.642	.574	.527	.469	.415	.364	.338
	.554	.027	.029	.017	.029	.026	.028	.031
Flare	.558	.403	.349	.302	.268	.225	.176	.156
	.568	.963	.972	.990	.978	.930	.898	.866
	.577	.256	.410	.486	.486	.507	.504	.519
	.587	.065	.098	.139	.156	.200	.238	.252
	.597	.042	.063	.087	.092	.119	.140	.148
Main stage	.607	.025	.031	.059	.063	.072	.087	.084
	.617	.019	.034	.058	.046	.055	.059	.055
	.627	.007	.028	.046	.040	.043	.047	.038
	.637	.002	.017	.035	.027	.032	.035	.027
	.647	.018	.003	.026	.018	.021	.020	.013
Main stage	.657	.022	.001	.021	.014	.017	.018	.011
	.667	.026	.005	.015	.008	.013	.012	.009
	.677	.032	.008	.019	.006	.009	.008	.009
	.687	.040	.016	.003	.001	.004	.006	.003
	.697	.037	.013	.000	.004	.002	.007	.008
Main stage	.707	.032	.013	.000	.004	.005	.011	.015
	.717	.032	.013	.000	.004	.005	.011	.015
	.727	.032	.013	.000	.004	.005	.011	.015
	.737	.032	.013	.000	.004	.005	.011	.015
	.747	.032	.013	.000	.004	.005	.011	.015
Main stage	.757	.032	.013	.000	.004	.005	.011	.015
	.767	.032	.013	.000	.004	.005	.011	.015
	.777	.032	.013	.000	.004	.005	.011	.015
	.787	.032	.013	.000	.004	.005	.011	.015
	.797	.032	.013	.000	.004	.005	.011	.015
Main stage	.807	.032	.013	.000	.004	.005	.011	.015
	.817	.032	.013	.000	.004	.005	.011	.015
	.827	.032	.013	.000	.004	.005	.011	.015
	.837	.032	.013	.000	.004	.005	.011	.015
	.847	.032	.013	.000	.004	.005	.011	.015
Main stage	.857	.032	.013	.000	.004	.005	.011	.015
	.867	.032	.013	.000	.004	.005	.011	.015
	.877	.032	.013	.000	.004	.005	.011	.015
	.887	.032	.013	.000	.004	.005	.011	.015
	.897	.032	.013	.000	.004	.005	.011	.015
Main stage	.907	.032	.013	.000	.004	.005	.011	.015
	.917	.032	.013	.000	.004	.005	.011	.015
	.927	.032	.013	.000	.004	.005	.011	.015
	.937	.032	.013	.000	.004	.005	.011	.015
	.947	.032	.013	.000	.004	.005	.011	.015
Main stage	.957	.032	.013	.000	.004	.005	.011	.015
	.967	.032	.013	.000	.004	.005	.011	.015
	.977	.032	.013	.000	.004	.005	.011	.015
	.987	.032	.013	.000	.004	.005	.011	.015
	.997	.032	.013	.000	.004	.005	.011	.015

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -0^\circ$						
		α							α						
		-10°	-6°	-3°	0°	3°	6°	10°	-10°	-6°	-3°	0°	3°	6°	10°
Main stage	x/l														
		.428	.262	.270	.247	.236	.199	.156	.075	.178	.248	.264	.275	.267	.182
		.438	.229	.242	.208	.202	.156	.128	.041	.071	.136	.151	.157	.143	.064
Transition flare		.448	.195	.197	.179	.163	.132	.089	.013	.002	.051	.061	.068	.048	.032
		.468	.100	.172	.073	.068	.031	.012	-.078	-.002	.051	.061	.068	.027	-.032
		.478	.002	-.005	.029	.040	.072	.116	-.176	-.002	.051	.061	.068	.027	-.032
Nose		.483	.128	-.097	.103	.086	.089	.098	-.135	.254	.212	.212	.195	.204	.273
		.489	.800	.809	.850	.843	.910	.999	-.1013	.788	.763	.792	.769	.847	.904
		.494	.222	.225	.243	.231	.252	.255	-.299	-.065	.017	.006	.012	.003	-.079
Main stage		.509	.106	.092	.104	.092	.101	.111	-.148	-.065	.017	.006	.012	.003	-.079
		.519	.025	.005	.006	.006	.003	.018	-.350	-.065	.017	.006	.012	.003	-.079
		.529	.039	.070	.070	.081	.073	.057	.014	.074	.140	.157	.174	.160	.066
Transition flare		.539	.120	.157	.162	.1	.165	.144	.107	.074	.140	.157	.174	.160	.066
		.549	.271	.302	.307	.31	.304	.283	.234	.421	.464	.464	.475	.478	.408
		.554	.508	.511	.493	.469	.461	.422	.361	.238	.286	.297	.308	.284	.230
Main stage		.568	.449	.469	.462	.462	.425	.381	.316	.238	.286	.297	.308	.284	.230
		.577	.998	.932	.909	.857	.745	.701	-.652	-.830	-.833	-.863	-.834	-.785	-.808
		.587	.546	.602	.620	.602	.640	.649	-.634	-.297	-.260	-.249	-.243	-.325	-.322
Main stage		.597	.135	.132	.185	.208	.322	.383	.461	.607	.607	.609	.605	.606	.606
		.607	.123	.080	.087	.081	.119	.163	.223	.627	.627	.627	.627	.627	.627
		.617	.106	.069	.069	.052	.061	.076	.108	.657	.657	.657	.657	.657	.657
Main stage		.627	.100	.063	.058	.046	.043	.053	.084	.627	.627	.627	.627	.627	.627
		.637	.094	.057	.052	.040	.043	.047	.079	.627	.627	.627	.627	.627	.627
		.647	.083	.046	.040	.029	.032	.047	.073	.627	.627	.627	.627	.627	.627
Main stage		.657	.078	.036	.034	.018	.025	.045	.071	.657	.657	.657	.657	.657	.657
		.667	.063	.027	.029	.012	.021	.040	.066	.657	.657	.657	.657	.657	.657
		.677	.049	.017	.023	.006	.017	.035	.061	.657	.657	.657	.657	.657	.657
Main stage		.687	.059	.022	.021	.003	.011	.029	.051	.657	.657	.657	.657	.657	.657
		.697	.057	.019	.015	.003	.007	.023	.040	.657	.657	.657	.657	.657	.657
		.707	.063	.019	.017	.001	.007	.020	.040	.657	.657	.657	.657	.657	.657
Main stage		.717	.046	.011	.012	.005	.004	.018	.033	.657	.657	.657	.657	.657	.657
		.727	.050	.018	.017	.000	.009	.020	.033	.657	.657	.657	.657	.657	.657
		.737	.049	.018	.017	.000	.009	.021	.034	.657	.657	.657	.657	.657	.657
Main stage		.747	.051	.018	.019	.001	.009	.022	.034	.657	.657	.657	.657	.657	.657
		.757	.058	.032	.023	.007	.015	.027	.038	.657	.657	.657	.657	.657	.657
		.767	.068	.032	.023	.007	.015	.027	.038	.657	.657	.657	.657	.657	.657
Main stage		.777	.135	.132	.185	.208	.322	.383	.461	.657	.657	.657	.657	.657	.657
		.787	.123	.080	.087	.081	.119	.163	.223	.657	.657	.657	.657	.657	.657
		.797	.106	.069	.069	.052	.061	.076	.108	.657	.657	.657	.657	.657	.657
Main stage		.807	.100	.063	.058	.046	.043	.053	.084	.657	.657	.657	.657	.657	.657
		.817	.094	.057	.052	.040	.043	.047	.079	.657	.657	.657	.657	.657	.657
		.827	.083	.046	.040	.029	.032	.047	.073	.657	.657	.657	.657	.657	.657
Main stage		.837	.078	.036	.034	.018	.025	.045	.071	.657	.657	.657	.657	.657	.657
		.847	.063	.027	.029	.012	.021	.040	.066	.657	.657	.657	.657	.657	.657
		.857	.049	.017	.023	.006	.017	.035	.061	.657	.657	.657	.657	.657	.657
Main stage		.867	.059	.022	.021	.003	.011	.029	.051	.657	.657	.657	.657	.657	.657
		.877	.057	.019	.015	.003	.007	.023	.040	.657	.657	.657	.657	.657	.657
		.887	.063	.019	.017	.001	.007	.020	.040	.657	.657	.657	.657	.657	.657
Main stage		.897	.046	.011	.012	.005	.004	.018	.033	.657	.657	.657	.657	.657	.657
		.907	.050	.018	.017	.000	.009	.020	.033	.657	.657	.657	.657	.657	.657
		.917	.049	.018	.017	.000	.009	.021	.034	.657	.657	.657	.657	.657	.657
Main stage		.927	.051	.018	.019	.001	.009	.022	.034	.657	.657	.657	.657	.657	.657
		.937	.058	.032	.023	.007	.015	.027	.038	.657	.657	.657	.657	.657	.657
		.947	.068	.032	.023	.007	.015	.027	.038	.657	.657	.657	.657	.657	.657
Main stage		.957	.135	.132	.185	.208	.322	.383	.461	.657	.657	.657	.657	.657	.657
		.967	.123	.080	.087	.081	.119	.163	.223	.657	.657	.657	.657	.657	.657
		.977	.106	.069	.069	.052	.061	.076	.108	.657	.657	.657	.657	.657	.657

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 12A - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

		C_p for - $\beta = 0^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	
x/l	Nose	.428 .438 .448 .468 .483 .489	.381 .351 .306 .207 .109 -.008	.324 .294 .248 .155 .059 -.025	.275 .241 .200 .105 .011 -.097	.226 .196 .150 .059 -.028 -.132	.183 .149 .112 .021 -.067 -.164	.123 .092 .055 -.033 -.114 -.211
	Upper stage	.494 .499 .509 .519 .529 .539 .549	-.021 -.052 .065 .143 .248 .435 .639	-.363 -.353 .034 .120 .229 .397 .588	-.382 -.382 .023 .125 .222 .362 .518	-.140 -.383 .003 .116 .221 .334 .447	-.129 -.372 .002 .127 .213 .306 .392	-.018 -.018 .115 .197 .267 .341
x/l	Flare	.554 .558	.037 .524	.034 .421	.034 .364	.034 .295	.037 .232	.036 .178
	Transition	.568 .577 .587 .597 .607 .617 .627 .637 .647 .657 .667 .677 .687 .697 .707 .717 .727 .737 .747 .757 .767 .777 .787 .797 .807 .817 .827 .837 .847 .857 .867 .877 .887 .897	-.952 -.695 -.204 -.037 -.021 -.017 -.013 -.002 -.014 -.001 -.019 -.024 -.026 -.033 -.041 -.051 -.064 -.077 -.086 -.094 -.104 -.114 -.124 -.134 -.144 -.154 -.164 -.174 -.184 -.194 -.204 -.214 -.224 -.234 -.244 -.254 -.264 -.274 -.284 -.294 -.304 -.314 -.324 -.334 -.344 -.354 -.364 -.374 -.384 -.394 -.404 -.414 -.424 -.434 -.444 -.454 -.464 -.474 -.484 -.494 -.504 -.514 -.524 -.534 -.544 -.554 -.564 -.574 -.584 -.594 -.604 -.614 -.624 -.634 -.644 -.654 -.664 -.674 -.684 -.694 -.704 -.714 -.724 -.734 -.744 -.754 -.764 -.774 -.784 -.794 -.804 -.814 -.824 -.834 -.844 -.854 -.864 -.874 -.884 -.894 -.904 -.914 -.924 -.934 -.944 -.954 -.964 -.974 -.984 -.994 -1.004	-.971 -.780 -.391 -.137 -.056 -.024 -.028 -.020 -.014 -.001 -.014 -.006 -.004 -.001				

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for $\beta = -60^\circ$							C_p for $\beta = -90^\circ$						
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$							
x/l	Main stage	.428	.301	.286	.272	.233	.191	.108	.418	.214	.287	.309	.309	.278	.217
		.438	.267	.248	.234	.196	.161	.074	.448	.112	.173	.189	.189	.157	.092
x/l	Transition	.448	.233	.218	.196	.165	.119	.040	.468	.032	.087	.102	.102	.062	.005
		.478	.134	.120	.098	.071	.028	-.048	.483	-.195	-.143	-.128	-.128	-.156	-.211
x/l	Upper stage	.483	.044	.025	.007	-.020	-.060	-.133	.489	-.1006	-.0947	-.0915	-.0915	-.0940	-.063
		.489	-.133	-.094	-.085	-.129	-.129	-.153	.489	-.1006	-.0947	-.0915	-.0915	-.0940	-.063
x/l	Nose	.494	-.180	-.155	-.137	-.113	-.085	-.045	.509	-.056	.004	.023	.023	.002	-.064
		.499	-.395	-.417	-.432	-.445	-.457	-.454	.509	-.056	.004	.023	.023	.002	-.064
x/l	Flare	.509	-.185	-.211	-.243	-.270	-.247	-.282	.529	.116	.191	.217	.217	.185	.115
		.519	.061	.023	.027	.019	.010	.037	.529	.116	.191	.217	.217	.185	.115
x/l	Main stage	.529	.162	.210	.226	.217	.201	.154	.549	.458	.514	.518	.518	.505	.446
		.539	.334	.373	.362	.350	.329	.279	.549	.458	.514	.518	.518	.505	.446
x/l	Transition	.549	.556	.537	.506	.494	.466	.403	.558	.376	.372	.398	.398	.370	.324
		.554	.537	.513	.498	.471	.432	.389	.558	.376	.372	.398	.398	.370	.324
x/l	Main stage	.568	-.104	-.955	-.950	-.823	-.761	-.664	.568	-.832	-.869	-.925	-.925	-.831	-.820
		.577	-.820	-.791	-.732	-.714	-.695	-.676	.568	-.832	-.869	-.925	-.925	-.831	-.820
x/l	Transition	.587	-.278	-.417	-.401	-.465	-.485	-.559	.587	-.539	-.476	-.430	-.430	-.489	-.532
		.597	-.153	-.152	-.191	-.242	-.286	-.372	.607	-.177	-.113	-.095	-.095	-.130	-.189
x/l	Main stage	.607	-.130	-.079	-.094	-.118	-.150	-.212	.627	-.122	-.055	-.036	-.036	-.056	-.130
		.617	-.115	-.048	-.055	-.063	-.084	-.123	.627	-.122	-.055	-.036	-.036	-.056	-.130
x/l	Transition	.627	-.103	-.036	-.039	-.044	-.056	-.084	.657	-.114	-.046	-.027	-.027	-.046	-.115
		.637	-.091	-.028	-.031	-.032	-.041	-.072	.657	-.114	-.046	-.027	-.027	-.046	-.115
x/l	Main stage	.657	-.082	-.036	-.018	-.023	-.032	-.064	.697	-.103	-.039	-.021	-.021	-.039	-.103
		.677	-.066	-.027	-.014	-.020	-.030	-.060	.697	-.103	-.039	-.021	-.021	-.039	-.103
x/l	Transition	.697	-.051	-.018	-.011	-.017	-.028	-.056	.737	-.094	-.032	-.016	-.016	-.033	-.095
		.737	-.058	-.021	-.008	-.013	-.024	-.049	.777	-.087	-.028	-.010	-.010	-.029	-.088
x/l	Main stage	.777	-.058	-.007	-.004	-.009	-.018	-.042	.785	-.091	-.029	-.012	-.012	-.028	-.086
		.817	-.049	-.018	-.002	-.007	-.015	-.038	.817	-.074	-.025	-.005	-.005	-.026	-.078
x/l	Transition	.857	-.055	-.009	-.005	-.010	-.016	-.035	.857	-.079	-.025	-.010	-.010	-.026	-.078
		.877	-.054	-.010	-.006	-.010	-.016	-.035	.897	-.082	-.028	-.014	-.014	-.030	-.082
x/l	Main stage	.917	-.064	-.017	-.012	-.017	-.023	-.042	.897	-.082	-.028	-.014	-.014	-.030	-.082
		.957	-.070	-.023	-.020	-.026	-.033	-.052	.997	-.146	-.103	-.095	-.095	-.103	-.134
x/l	Transition	.997	-.146	-.103	-.083	-.095	-.106	-.134							

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		C_p for - $\theta = 0^\circ$						C_p for - $\theta = -30^\circ$									
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
Main stage	Flare	.551	.477	.426	.374	.332	.292	.238	.428	Main stage	.515	.458	.423	.374	.332	.286	.226
	Transition	.524	.452	.402	.350	.305	.262	.211	.438		.479	.428	.393	.344	.302	.253	.190
	Flare	.485	.413	.366	.314	.269	.225	.178	.448		.452	.395	.357	.311	.269	.222	.166
	Transition	.410	.338	.297	.255	.200	.159	.109	.468		.370	.320	.285	.242	.200	.159	.100
	Flare	.337	.275	.237	.198	.149	.108	.064	.478		.307	.260	.231	.198	.152	.111	.058
Main stage	Flare	.483	.409	.368	.324	.279	.236	.192	.489	Main stage	.226	.191	.168	.128	.095	.060	.019
	Transition	.259	.209	.177	.134	.095	.060	.025	.483		.528	.533	.535	.548	.560	.575	.544
	Flare	.258	.207	.175	.132	.093	.058	.023	.494		.579	.582	.584	.594	.606	.618	.624
	Transition	.207	.157	.125	.082	.043	.008	.000	.509		.694	.694	.694	.694	.694	.694	.694
	Flare	.157	.107	.075	.032	.000	.000	.000	.519		.719	.719	.719	.719	.719	.719	.719
Main stage	Flare	.157	.107	.075	.032	.000	.000	.000	.519	Main stage	.240	.222	.222	.222	.222	.222	.222
	Transition	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Flare	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Transition	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Flare	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
Main stage	Flare	.157	.107	.075	.032	.000	.000	.000	.519	Main stage	.240	.222	.222	.222	.222	.222	.222
	Transition	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Flare	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Transition	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222
	Flare	.157	.107	.075	.032	.000	.000	.000	.519		.240	.222	.222	.222	.222	.222	.222

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

$x/1$		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -0^\circ$							AC 100	
		$\alpha = -60^\circ$							$\alpha = -0^\circ$								
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nose		.428	.407	.393	.371	.338	.298	.226	.418	.386	.408	.407	.404	.380	.331	Nose	
		.438	.373	.363	.341	.308	.271	.193	.448	.281	.309	.305	.293	.271	.220		
Main stage		.449	.429	.415	.393	.360	.323	.251	.458	.291	.319	.314	.301	.279	.228	Main stage	
		.468	.427	.413	.391	.358	.321	.249	.468	.281	.309	.304	.291	.269	.218		
Upper stage		.478	.458	.444	.422	.389	.352	.280	.483	.314	.342	.337	.324	.302	.251	Upper stage	
		.483	.463	.449	.427	.394	.357	.285	.483	.314	.342	.337	.324	.302	.251		
Transition		.489	.469	.455	.433	.400	.363	.291	.489	.320	.348	.343	.330	.308	.257	Transition	
		.494	.474	.460	.438	.405	.368	.296	.494	.320	.348	.343	.330	.308	.257		
Flare		.499	.479	.465	.443	.410	.373	.301	.509	.329	.357	.352	.339	.317	.266	Flare	
		.509	.489	.475	.453	.420	.383	.311	.509	.329	.357	.352	.339	.317	.266		
Main stage		.519	.499	.485	.463	.430	.393	.321	.519	.337	.365	.360	.347	.325	.274	Main stage	
		.529	.509	.495	.473	.440	.403	.331	.529	.337	.365	.360	.347	.325	.274		
Transition		.539	.519	.505	.483	.450	.413	.341	.549	.346	.374	.369	.356	.334	.283	Transition	
		.549	.529	.515	.493	.460	.423	.351	.549	.346	.374	.369	.356	.334	.283		
Flare		.554	.534	.520	.498	.465	.428	.356	.558	.351	.379	.374	.361	.339	.288	Flare	
		.568	.548	.534	.512	.479	.442	.370	.568	.351	.379	.374	.361	.339	.288		
Main stage		.568	.548	.534	.512	.479	.442	.370	.568	.351	.379	.374	.361	.339	.288	Main stage	
		.577	.557	.543	.521	.488	.451	.379	.577	.351	.379	.374	.361	.339	.288		
Transition		.587	.567	.553	.531	.498	.461	.380	.587	.351	.379	.374	.361	.339	.288	Transition	
		.597	.577	.563	.541	.508	.471	.380	.597	.351	.379	.374	.361	.339	.288		
Flare		.607	.587	.573	.551	.518	.481	.390	.607	.351	.379	.374	.361	.339	.288	Flare	
		.617	.597	.583	.561	.528	.491	.390	.617	.351	.379	.374	.361	.339	.288		
Main stage		.627	.607	.593	.571	.538	.491	.390	.627	.351	.379	.374	.361	.339	.288	Main stage	
		.637	.617	.603	.581	.548	.501	.390	.637	.351	.379	.374	.361	.339	.288		
Transition		.637	.617	.603	.581	.548	.501	.390	.637	.351	.379	.374	.361	.339	.288	Transition	
		.647	.627	.613	.591	.558	.511	.390	.647	.351	.379	.374	.361	.339	.288		
Flare		.657	.637	.623	.601	.568	.521	.390	.657	.351	.379	.374	.361	.339	.288	Flare	
		.667	.647	.633	.611	.578	.531	.390	.667	.351	.379	.374	.361	.339	.288		
Main stage		.677	.657	.643	.621	.588	.541	.390	.677	.351	.379	.374	.361	.339	.288	Main stage	
		.687	.667	.653	.631	.598	.551	.390	.687	.351	.379	.374	.361	.339	.288		
Transition		.697	.677	.663	.641	.608	.561	.390	.697	.351	.379	.374	.361	.339	.288	Transition	
		.707	.687	.673	.651	.618	.571	.390	.707	.351	.379	.374	.361	.339	.288		
Flare		.717	.697	.683	.661	.628	.581	.390	.717	.351	.379	.374	.361	.339	.288	Flare	
		.727	.707	.693	.671	.638	.591	.390	.727	.351	.379	.374	.361	.339	.288		
Main stage		.737	.717	.703	.681	.648	.601	.390	.737	.351	.379	.374	.361	.339	.288	Main stage	
		.747	.727	.713	.691	.658	.611	.390	.747	.351	.379	.374	.361	.339	.288		
Transition		.757	.737	.723	.701	.668	.621	.390	.757	.351	.379	.374	.361	.339	.288	Transition	
		.767	.747	.733	.711	.678	.631	.390	.767	.351	.379	.374	.361	.339	.288		
Flare		.777	.757	.743	.721	.688	.641	.390	.777	.351	.379	.374	.361	.339	.288	Flare	
		.787	.767	.753	.731	.698	.651	.390	.787	.351	.379	.374	.361	.339	.288		
Main stage		.785	.765	.751	.729	.696	.649	.390	.785	.351	.379	.374	.361	.339	.288	Main stage	
		.817	.797	.783	.761	.728	.681	.390	.817	.351	.379	.374	.361	.339	.288		
Transition		.817	.797	.783	.761	.728	.681	.390	.817	.351	.379	.374	.361	.339	.288	Transition	
		.827	.807	.793	.771	.738	.691	.390	.827	.351	.379	.374	.361	.339	.288		
Flare		.827	.807	.793	.771	.738	.691	.390	.827	.351	.379	.374	.361	.339	.288	Flare	
		.837	.817	.803	.781	.748	.701	.390	.837	.351	.379	.374	.361	.339	.288		
Main stage		.837	.817	.803	.781	.748	.701	.390	.837	.351	.379	.374	.361	.339	.288	Main stage	
		.847	.827	.813	.791	.758	.711	.390	.847	.351	.379	.374	.361	.339	.288		
Transition		.847	.827	.813	.791	.758	.711	.390	.847	.351	.379	.374	.361	.339	.288	Transition	
		.857	.837	.823	.801	.768	.721	.390	.857	.351	.379	.374	.361	.339	.288		
Flare		.857	.837	.823	.801	.768	.721	.390	.857	.351	.379	.374	.361	.339	.288	Flare	
		.867	.847	.833	.811	.778	.731	.390	.867	.351	.379	.374	.361	.339	.288		
Main stage		.867	.847	.833	.811	.778	.731	.390	.867	.351	.379	.374	.361	.339	.288	Main stage	
		.877	.857	.843	.821	.788	.741	.390	.877	.351	.379	.374	.361	.339	.288		
Transition		.877	.857	.843	.821	.788	.741	.390	.877	.351	.379	.374	.361	.339	.288	Transition	
		.887	.867	.853	.831	.798	.751	.390	.887	.351	.379	.374	.361	.339	.288		
Flare		.887	.867	.853	.831	.798	.751	.390	.887	.351	.379	.374	.361	.339	.288	Flare	
		.897	.877	.863	.841	.808	.761	.390	.897	.351	.379	.374	.361	.339	.288		
Main stage		.897	.877	.863	.841	.808	.761	.390	.897	.351	.379	.374	.361	.339	.288	Main stage	
		.907	.887	.873	.851	.818	.771	.390	.907	.351	.379	.374	.361	.339	.288		
Transition		.907	.887	.873	.851	.818	.771	.390	.907	.351	.379	.374	.361	.339	.288	Transition	
		.917	.897	.883	.861	.828	.781	.390	.917	.351	.379	.374	.361	.339	.288		
Flare		.917	.897	.883	.861	.828	.781	.390	.917	.351	.379	.374	.361	.339	.288	Flare	
		.927	.907	.893	.871	.838	.791	.390	.927	.351	.379	.374	.361	.339	.288		
Main stage		.927	.907	.893	.871	.838	.791	.390	.927	.351	.379	.374	.361	.339	.288	Main stage	
		.937	.917	.903	.881	.848	.801	.390	.937	.351	.379	.374	.361	.339	.288		
Transition		.937	.917	.903	.881	.848	.801	.390	.937	.351	.379	.374	.361	.339	.288	Transition	
		.947	.927	.913	.891	.858	.811	.390	.947	.351	.379	.374	.361	.339	.288		
Flare		.947	.927	.913	.891	.858	.811	.390	.947	.351	.379	.374	.361	.339	.288	Flare	
		.957	.937	.923	.901	.868	.821	.390	.957	.351	.379	.374	.361	.339	.288		
Main stage		.957	.937	.923	.901	.868	.821	.390	.957	.351	.379	.374	.361	.339	.288	Main stage	
		.967	.947	.933	.911	.878	.831	.390	.967	.351	.379	.374	.361	.339	.288		
Transition		.967	.947	.933	.911	.878	.831	.390	.967	.351	.379	.374	.361	.339	.288	Transition	
		.977	.957	.943	.921	.888	.841	.390	.977	.351	.379	.374	.361	.339	.288		
Flare		.977	.957	.943	.921	.888	.841	.390	.977	.351	.379	.374	.361	.339	.288	Flare	
		.987	.967	.953	.931	.898	.851	.390	.987	.351	.379	.374	.361	.339	.288		
Main stage		.987	.967	.953	.931	.898	.851	.390	.987	.351	.379	.374	.361	.339	.288	Main stage	
		.997	.977	.963	.941	.908	.861	.390	.997	.351	.379	.374	.361	.339	.288		

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124 - Continued.

(a) $M = 1.20$; $\alpha = -10^\circ$ to 10°

C_p for $\beta = 0^\circ$										C_p for $\beta = -30^\circ$											
x/l	$\alpha = 0^\circ$					$\alpha = 6^\circ$					x/l	$\alpha = 0^\circ$					$\alpha = 6^\circ$				
	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$		$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$						
Nose	.428	.506	.430	.364	.314	.277	.239	.192	.428	.474	.411	.359	.314	.282	.233	.181					
	.438	.517	.435	.375	.322	.277	.247	.192	.438	.471	.413	.359	.317	.274	.239	.173					
	.448	.506	.427	.359	.320	.269	.236	.181	.448	.469	.408	.354	.317	.274	.236	.175					
	.468	.493	.416	.362	.317	.274	.231	.181	.468	.453	.397	.351	.312	.274	.233	.173					
Upper stage	.483	.466	.403	.359	.312	.274	.231	.176	.478	.434	.389	.351	.312	.277	.236	.173					
	.489	.426	.376	.338	.298	.258	.220	.165	.483	.388	.355	.327	.290	.258	.217	.157					
	.494	.243	.258	.273	.289	.310	.328	.359	.489	.215	.217	.226	.239	.266	.287	.315					
	.499	.289	.332	.350	.371	.385	.391	.379	.494	.308	.338	.355	.374	.390	.410	.442					
Transition	.509	.203	.266	.292	.324	.343	.351	.328	.509	.250	.297	.317	.341	.360	.372	.398					
	.519	.112	.183	.220	.253	.271	.288	.312	.519	.096	.128	.151	.175	.195	.210	.230					
	.529	.066	.123	.178	.225	.262	.292	.324	.529	.042	.083	.121	.156	.194	.232	.268					
	.539	.299	.346	.394	.421	.447	.467	.487	.539	.288	.333	.375	.408	.432	.458	.485					
Flare	.549	.635	.481	.387	.275	.211	.152	.154	.549	.616	.482	.381	.269	.167	.174	.137					
	.554	.060	.050	.049	.050	.048	.052	.054	.554	.875	.637	.462	.300	.220	.115	.103					
	.558	.995	.893	.712	.414	.197	.128	.135	.558	.981	.887	.688	.341	.303	.373	.342					
Main stage	.568	.612	.594	.565	.528	.453	.565	.577	.568	.631	.606	.565	.547	.547	.602	.602					
	.577	.344	.360	.350	.327	.205	.215	.213	.577	.361	.377	.369	.338	.338	.419	.486					
	.587	.159	.225	.259	.230	.219	.223	.246	.587	.192	.247	.261	.228	.244	.341	.442					
	.597	.090	.161	.198	.181	.214	.220	.255	.597	.088	.126	.148	.145	.150	.176	.219					
Nose	.607	.052	.120	.151	.162	.191	.204	.227	.607	.082	.131	.154	.164	.15	.219	.219					
	.617	.041	.098	.124	.145	.167	.170	.175	.617	.063	.106	.124	.148	.150	.219	.219					
	.627	.027	.081	.104	.128	.136	.135	.119	.627	.060	.092	.107	.131	.132	.169	.169					
	.637	.016	.065	.082	.098	.111	.104	.078	.637	.049	.079	.090	.104	.106	.130	.130					
Transition	.657	.027	.077	.080	.077	.073	.058	.041	.657	.057	.069	.075	.069	.062	.073	.073					
	.677	.034	.044	.049	.051	.052	.032	.024	.677	.057	.042	.042	.043	.045	.060	.060					
	.697	.027	.040	.042	.039	.030	.018	.018	.697	.049	.047	.040	.045	.041	.058	.058					
	.737	.020	.025	.027	.024	.024	.027	.016	.737	.049	.039	.030	.035	.033	.039	.039					
Main stage	.777	.015	.012	.021	.024	.028	.026	.016	.777	.014	.019	.028	.017	.025	.029	.053					
	.785	.026	.004	.018	.013	.018	.009	.004	.785	.007	.016	.017	.008	.013	.016	.056					
	.817	.021	.002	.005	.021	.018	.010	.014	.817	.005	.014	.009	.016	.016	.044	.044					
	.857	.020	.010	.009	.002	.001	.005	.010	.857	.005	.002	.007	.010	.010	.016	.050					
Nose	.877	.030	.003	.007	.002	.004	.005	.010	.877	.001	.002	.010	.010	.016	.016	.044					
	.897	.013	.003	.001	.005	.009	.013	.017	.897	.001	.002	.007	.004	.006	.015	.057					
										.013	.011	.003	.006	.015	.057	.057					
										.016	.011	.003	.006	.015	.057	.057					
Transition	.917	.016	.016	.015	.016	.017	.016	.016	.917	.016	.015	.005	.006	.016	.016	.050					
	.937	.016	.015	.015	.016	.017	.016	.016	.937	.016	.015	.005	.006	.016	.016	.050					
	.957	.016	.015	.015	.016	.017	.016	.016	.957	.016	.015	.005	.006	.016	.016	.050					
	.977	.016	.015	.015	.016	.017	.016	.016	.977	.016	.015	.005	.006	.016	.016	.050					
Main stage	.997	.006	.021	.033	.065	.085	.095	.095	.997	.006	.021	.033	.065	.085	.095	.095					

TABLE 11.- PRESSURE COEFFICIENTS FOR CONFIGURATION 124 - Concluded

(c) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

		C_p for -						
		$\beta = -60^\circ$						
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$
x/l	Noise	.428	.362	.330	.312	.282	.247	.184
		.438	.367	.327	.314	.282	.263	.181
		.448	.364	.332	.314	.285	.249	.176
		.468	.349	.332	.312	.288	.249	.179
		.478	.330	.322	.312	.290	.252	.173
	Upper stage	.483	.204	.153	.144	.146	.169	.211
		.489	.368	.311	.302	.299	.317	.359
		.494	.377	.339	.335	.336	.413	.453
		.509	.220	.225	.230	.231	.157	.092
		.519	.181	.128	.106	.084	.056	.001
	Transition	.529	.268	.265	.211	.156	.144	.063
		.539	.390	.293	.236	.206	.202	.137
		.549	.459	.334	.261	.264	.260	.168
		.554	.699	.419	.371	.344	.324	.339
x/l	Main stage	.568	.645	.546	.506	.567	.587	.657
		.577	.435	.355	.253	.409	.441	.547
		.587	.275	.267	.233	.327	.372	.459
		.597	.196	.215	.214	.249	.317	.384
		.607	.162	.168	.181	.175	.250	.324
	Transition	.617	.151	.145	.148	.139	.170	.249
		.627	.151	.134	.126	.123	.137	.177
		.637	.137	.117	.096	.098	.107	.144
		.657	.150	.075	.060	.059	.082	.132
		.677	.138	.072	.051	.057	.073	.124
x/l	Main stage	.697	.116	.068	.046	.054	.044	.116
		.737	.117	.060	.036	.039	.063	.093
		.777	.085	.046	.034	.030	.045	.070
		.785	.088	.045	.024	.021	.035	.067
		.817	.062	.027	.012	.018	.034	.043
	Transition	.857	.071	.019	.015	.024	.034	.043
		.877	.081	.032	.009	.009	.024	.043
		.897	.071	.031	.010	.004	.018	.043
		.917	.079	.032	.008	.010	.023	.043
		.937	.077	.037	.015	.021	.021	.043
x/l	Main stage	.937	.070	.042	.053	.061	.084	.113

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 324

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$

C_p for -										C_p for -																													
$\phi = 0^\circ$										$\phi = -30^\circ$																													
x/l										x/l																													
$M = 0.40$										$M = 0.40$																													
$M = 0.70$										$M = 0.70$																													
$M = 0.75$										$M = 0.75$																													
$M = 0.85$										$M = 0.85$																													
$M = 0.90$										$M = 0.90$																													
$M = 0.95$										$M = 0.95$																													
Nose										Main stage																													
																				Transition																			
																														Flare									
Upper stage										Upper stage																													
																				Upper stage										Upper stage									
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NO. 324

TABLE 2.- PRESSURE COEFFICIENTS FOR CONE-FLARE NOSE - Continued

(a) $M = 0.40$ to 0.95 ; $\alpha = 0^\circ$ - Continued

NC 324

		C_p for -					
		$\beta = 0^\circ$					
		$M = 0.40$	$M = 0.70$	$M = 0.85$	$M = 0.90$	$M = 0.95$	
x/l	Main stage	.461	.487	.553	.582	.629	.690
		.471	.495	.569	.598	.645	.706
x/l	Upper stage	.481	.509	.583	.612	.659	.720
		.489	.517	.591	.620	.667	.728
x/l	Transition	.509	.537	.611	.640	.687	.748
		.517	.545	.619	.648	.695	.756
x/l	Flare	.529	.557	.631	.660	.707	.768
		.537	.565	.639	.668	.715	.776
x/l	Nose	.549	.577	.651	.680	.727	.788
		.557	.585	.659	.688	.735	.796
x/l	Main stage	.568	.596	.670	.699	.746	.807
		.576	.604	.678	.707	.754	.815
x/l	Upper stage	.587	.615	.689	.718	.765	.826
		.595	.623	.697	.726	.773	.834
x/l	Transition	.607	.635	.709	.738	.785	.846
		.615	.643	.717	.746	.793	.854
x/l	Flare	.627	.655	.729	.758	.805	.866
		.635	.663	.737	.766	.813	.874
x/l	Nose	.657	.685	.759	.788	.835	.896
		.665	.693	.767	.796	.843	.904
x/l	Main stage	.697	.725	.799	.828	.875	.936
		.705	.733	.807	.836	.883	.944
x/l	Upper stage	.737	.765	.839	.868	.915	.976
		.745	.773	.847	.876	.923	.984
x/l	Transition	.777	.805	.879	.908	.955	1.016
		.785	.813	.887	.916	.963	1.024
x/l	Flare	.817	.845	.919	.948	.995	1.056
		.825	.853	.927	.956	1.003	1.064
x/l	Nose	.857	.885	.959	.988	1.035	1.096
		.865	.893	.967	.996	1.043	1.104

$$\alpha = 0.50; \alpha = 1.00 \text{ to } 100$$

C_p for $\beta = 0^\circ$									
$x/1$	$\alpha = -10^\circ$	$\alpha = -5^\circ$	$\alpha = 0^\circ$	$\alpha = 5^\circ$	$\alpha = 10^\circ$				
Nose	.461	.598	.531	.460	.390	Main stage	-1.009	-1.082	-1.059
	.471	.505	.371	.311	.252		.577	-1.199	-1.307	-1.295
Upper stage	.481	.360	.261	.194	.150	Transition	.587	.106	.142
	.489	-1.125	-1.094	.866	.761		.597	-1.062	.136	.096
Upper stage	.494	.382	.263	.198	.154	Flare	.607	.067	.067
	.499	-.382	.163	.066	.056		.617	-.017	.049	.050
Transition	.509	.040	.040	.021	.021	Main stage	.627	-.005	-.038
	.519	.109	.076	.064	.007		.637	.027	.039	.027
Upper stage	.529	.194	.167	.110	.078	Transition	.647	.027	.033
	.539	.354	.315	.257	.190		.657	.011	.021	.033
Upper stage	.549	.622	.555	.430	.220	Flare	.667	.027	.033
	.554	.040	.036	.030	.043		.677	.019	.009	.025
Transition	.558	.333	.276	.136	.082	Main stage	.687	.016	.015
	.568	.1009	.052	.029	.021		.697	.023	.010	.009
Main stage	.577	.199	.169	.102	.068	Transition	.707	.007	.007
	.587	.062	.066	.067	.067		.717	.008	.008	.008
Upper stage	.597	.034	.038	.038	.038	Flare	.727	.004	.004
	.607	.017	.019	.019	.019		.737	.004	.004	.004
Transition	.617	.005	.005	.005	.005	Main stage	.747	.004	.004
	.627	.006	.006	.006	.006		.757	.004	.004	.004
Main stage	.637	.011	.011	.011	.011	Transition	.767	.004	.004
	.647	.019	.019	.019	.019		.777	.004	.004	.004
Upper stage	.657	.023	.023	.023	.023	Flare	.785	.004	.004
	.667	.027	.027	.027	.027		.797	.004	.004	.004
Transition	.677	.033	.033	.033	.033	Main stage	.807	.004	.004
	.687	.037	.037	.037	.037		.817	.004	.004	.004
Main stage	.697	.043	.043	.043	.043	Transition	.827	.004	.004
	.707	.047	.047	.047	.047		.837	.004	.004	.004
Upper stage	.717	.053	.053	.053	.053	Flare	.847	.004	.004
	.727	.057	.057	.057	.057		.857	.004	.004	.004
Transition	.737	.063	.063	.063	.063	Main stage	.867	.004	.004
	.747	.067	.067	.067	.067		.877	.004	.004	.004
Main stage	.757	.073	.073	.073	.073	Transition	.887	.004	.004
	.767	.077	.077	.077	.077		.897	.004	.004	.004
Upper stage	.777	.083	.083	.083	.083	Flare	.907	.004	.004
	.787	.087	.087	.087	.087		.917	.004	.004	.004
Transition	.797	.093	.093	.093	.093	Main stage	.927	.004	.004
	.807	.097	.097	.097	.097		.937	.004	.004	.004
Main stage	.817	.103	.103	.103	.103	Transition	.947	.004	.004
	.827	.107	.107	.107	.107		.957	.004	.004	.004
Upper stage	.837	.113	.113	.113	.113	Flare	.967	.004	.004
	.847	.117	.117	.117	.117		.977	.004	.004	.004
Transition	.857	.123	.123	.123	.123	Main stage	.987	.004	.004
	.867	.127	.127	.127	.127		.997	.004	.004	.004
Main stage	.877	.133	.133	.133	.133	Transition	.997	.004	.004
	.887	.137	.137	.137	.137		.997	.004	.004	.004
Upper stage	.897	.143	.143	.143	.143	Flare	.997	.004	.004
	.907	.147	.147	.147	.147		.997	.004	.004	.004
Transition	.917	.153	.153	.153	.153	Main stage	.997	.004	.004
	.927	.157	.157	.157	.157		.997	.004	.004	.004
Main stage	.937	.163	.163	.163	.163	Transition	.997	.004	.004
	.947	.167	.167	.167	.167		.997	.004	.004	.004
Upper stage	.957	.173	.173	.173	.173	Flare	.997	.004	.004
	.967	.177	.177	.177	.177		.997	.004	.004	.004
Transition	.977	.183	.183	.183	.183	Main stage	.997	.004	.004
	.987	.187	.187	.187	.187		.997	.004	.004	.004
Main stage	.997	.193	.193	.193	.193	Transition	.997	.004	.004
	.997	.197	.197	.197	.197		.997	.004	.004	.004
Upper stage	.997	.203	.203	.203	.203	Flare	.997	.004	.004
	.997	.207	.207	.207	.207		.997	.004	.004	.004
Transition	.997	.213	.213	.213	.213	Main stage	.997	.004	.004
	.997	.217	.217	.217	.217		.997	.004	.004	.004
Main stage	.997	.223	.223	.223	.223	Transition	.997	.004	.004
	.997	.227	.227	.227	.227		.997	.004	.004	.004
Upper stage	.997	.233	.233	.233	.233	Flare	.997	.004	.004
	.997	.237	.237	.237	.237		.997	.004	.004	.004
Transition	.997	.243	.243	.243	.243	Main stage	.997	.004	.004
	.997	.247	.247	.247	.247		.997	.004	.004	.004
Main stage	.997	.253	.253	.253	.253	Transition	.997	.004	.004
	.997	.257	.257	.257	.257		.997	.004	.004	.004
Upper stage	.997	.263	.263	.263	.263	Flare	.997	.004	.004
	.997	.267	.267	.267	.267		.997	.004	.004	.004
Transition	.997	.273	.273	.273	.273	Main stage	.997	.004	.004
	.997	.277	.277	.277	.277		.997	.004	.004	.004
Main stage	.997	.283	.283	.283	.283	Transition	.997	.004	.004
	.997	.287	.287	.287	.287		.997	.004	.004	.004
Upper stage	.997	.293	.293	.293	.293	Flare	.997	.004	.004
	.997	.297	.297	.297	.297		.997	.004	.004	.004
Transition	.997	.303	.303	.303	.303	Main stage	.997	.004	.004
	.997	.307	.307	.307	.307		.997	.004	.004	.004
Main stage	.997	.313	.313	.313	.313	Transition	.997	.004	.004
	.997	.317	.317	.317	.317		.997	.004	.004	.004
Upper stage	.997	.323	.323	.323	.323	Flare	.997	.004	.004
	.997	.327	.327	.327	.327		.997	.004	.004	.004
Transition	.997	.333	.333	.333	.333	Main stage	.997	.004	.004
	.997	.337	.337	.337	.337		.997	.004	.004	.004
Main stage	.997	.343	.343	.343	.343	Transition	.997	.004	.004
	.997	.347	.347	.347	.347		.997	.004	.004	.004
Upper stage	.997	.353	.353	.353	.353	Flare	.997	.004	.004
	.997	.357	.357	.357	.357		.997	.004	.004	.004
Transition	.997	.363	.363	.363	.363	Main stage	.997	.004	.004
	.997	.367	.367	.367	.367		.997	.004	.004	.004
Main stage	.997	.373	.373	.373	.373	Transition	.997	.004	.004
	.997	.377	.377	.377	.377		.997	.004	.004	.004
Upper stage	.997	.383	.383	.383	.383	Flare	.997	.004	.004
	.997	.387	.387	.387	.387		.997	.004	.004	.004
Transition	.997	.393	.393	.393	.393	Main stage	.997	.004	.004
	.997	.397	.397	.397	.397		.997	.004	.004	.004
Main stage	.997	.403	.403	.403	.403	Transition	.997	.004	.004
	.997	.407	.407	.407	.407		.997	.004	.004	.004
Upper stage	.997	.413	.413	.413	.413	Flare	.997	.004	.004
	.997	.417	.417	.417	.417		.997	.004	.004	.004
Transition	.997	.423	.423	.423	.423	Main stage	.997	.004	.004
	.997	.427	.427	.427	.427		.997	.004	.004	.004
Main stage	.997	.433	.433	.433	.433	Transition	.997	.004	.004
	.997	.437	.437	.437	.437		.997	.004	.004	.004
Upper stage	.997	.443	.443	.443	.443	Flare	.997	.004	.004
	.997	.447	.447	.447	.447		.997	.004	.004	.004
Transition	.997	.453	.453	.453	.453	Main stage	.997	.004	.004
	.997	.457	.457	.457	.457		.997	.004	.004	.004
Main stage	.997	.463	.463	.463	.463	Transition	.997	.004	.004
	.997	.467	.467	.467	.467		.997	.004	.004	.004
Upper stage	.997	.473	.473	.473	.473	Flare	.997	.004	.004
	.997	.477	.477	.477	.477		.997	.004	.004	.004
Transition	.997	.483	.483	.483	.483	Main stage	.997	.004	.004
	.997	.487	.487	.487	.487		.997	.004	.004	.004
Main stage	.997	.493	.493	.493	.493	Transition	.997	.004	.004
	.997	.497	.497	.497	.497		.997	.004	.004	.004
Upper stage	.997	.503	.503	.503	.503	Flare	.997	.004	.004
	.997	.507	.507	.507	.507		.997	.004	.004	.004
Transition	.997	.513	.513	.513	.513	Main stage	.997	.004	.004
	.997	.517	.517	.517	.517		.997	.004	.004	.004
Main stage	.997	.523	.523	.523	.523	Transition	.997	.004	.004
	.997	.527	.527	.527	.527		.997	.004	.004	.004
Upper stage	.997	.533	.533	.533	.533	Flare	.997	.004	.004
	.997	.537	.537	.537	.537		.997	.004	.004	.004
Transition	.997	.543	.543	.543	.543	Main stage	.997	.004	.004
	.997	.547	.547	.547	.547		.997	.004	.004	.004
Main stage	.997	.553	.553	.553	.553	Transition	.997	.004	.004
	.997	.557	.557	.557	.557		.997	.004	.004	.004
Upper stage	.997	.563	.563	.563	.563	Flare	.997	.004	.004
	.997	.567	.567	.567	.567		.997	.004	.004	.004
Transition	.997	.573	.573	.573	.573	Main stage	.997	.004	.004
	.997	.577	.577	.577	.577		.997	.004	.004	.004
Main stage	.997	.583	.583	.583	.583	Transition	.997	.004	.004
	.997	.587	.587	.587	.587		.997	.004	.004	.004
Upper stage	.997	.593	.593	.593	.593	Flare	.997	.004	.004
	.997	.597	.597	.597	.597		.997	.004	.004	.004
Transition	.997	.603	.603	.603	.603	Main stage	.997	.004	.004
	.997	.607	.607	.607	.607		.997	.004	.004	.004
Main stage	.997	.613	.613	.613	.613	Transition	.997	.004	.004
	.997	.617	.617	.617	.617		.997	.004	.004	.004
Upper stage	.997	.623	.623	.623	.623	Flare	.997	.004	.004
	.997	.627	.627	.627	.627		.997	.004	.004	.004
Transition	.997	.633	.633	.633	.633	Main stage	.997	.004	.004
	.997	.637	.637	.637	.637		.997	.004	.004	.004
Main stage	.997	.643	.643	.643	.643	Transition	.997	.004	.004
	.997	.647	.647	.647	.647		.997	.004	.004	.004
Upper stage	.997	.653	.653	.653	.653	Flare	.997	.004	.004
	.997	.657	.657	.657	.657		.997	.00	

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 324 - Continued

(b) $M = 0.60$; $\alpha = -10^\circ$ to 10° - Concluded

x/i		C _p for - β = -50°						
		α = -10°	α = -6°	α = -3°	α = 0°	α = 3°	α = 6°	α = 10°
Main stage	568	-1.021	-1.035	-1.013	-1.065	-1.053	-1.091	-1.128
	577	-1.427	-1.408	-1.381	-1.278	-1.283	-1.458	-1.500
	587	-1.137	-1.135	-1.136	-1.136	-1.152	-1.167	-1.182
Transition	597	-1.108	-1.089	-1.064	-1.085	-1.101	-1.105	-1.139
	617	-0.997	-0.972	-0.967	-0.978	-0.978	-0.975	-0.999
	627	-0.985	-0.961	-0.956	-0.950	-0.961	-0.965	-0.988
Rise	637	-0.880	-0.855	-0.844	-0.839	-0.850	-0.853	-0.882
	657	-0.774	-0.744	-0.733	-0.721	-0.732	-0.748	-0.777
	677	-0.640	-0.633	-0.622	-0.621	-0.632	-0.639	-0.670
Main stage	697	-0.466	-0.424	-0.414	-0.409	-0.420	-0.429	-0.463
	737	-0.358	-0.330	-0.314	-0.305	-0.314	-0.329	-0.363
	777	-0.252	-0.222	-0.208	-0.201	-0.210	-0.216	-0.255
Transition	785	-0.244	-0.216	-0.204	-0.201	-0.208	-0.216	-0.257
	817	-0.141	-0.116	-0.104	-0.104	-0.108	-0.109	-0.143
	857	-0.068	-0.024	-0.004	-0.004	-0.005	-0.009	-0.037
Rise	877	-0.048	-0.021	-0.009	-0.001	-0.009	-0.013	-0.037
	897	-0.050	-0.024	-0.011	-0.002	-0.010	-0.012	-0.035
	917	-0.057	-0.029	-0.016	-0.005	-0.015	-0.019	-0.041
Main stage	957	-0.063	-0.036	-0.024	-0.015	-0.025	-0.028	-0.050
	977	-0.130	-0.105	-0.089	-0.072	-0.087	-0.097	-0.128
	997	-0.130	-0.105	-0.089	-0.072	-0.087	-0.097	-0.128

x/i		C _p for - β = -50°						
		α = -10°	α = -6°	α = -3°	α = 0°	α = 3°	α = 6°	α = 10°
Main stage	568	-1.021	-1.035	-1.013	-1.065	-1.053	-1.091	-1.128
	577	-1.427	-1.408	-1.381	-1.278	-1.283	-1.458	-1.500
	587	-1.137	-1.135	-1.136	-1.136	-1.152	-1.167	-1.182
Transition	597	-1.108	-1.089	-1.064	-1.085	-1.101	-1.105	-1.139
	617	-0.997	-0.972	-0.967	-0.978	-0.978	-0.975	-0.999
	627	-0.985	-0.961	-0.956	-0.950	-0.961	-0.965	-0.988
Rise	637	-0.880	-0.855	-0.844	-0.839	-0.850	-0.853	-0.882
	657	-0.774	-0.744	-0.733	-0.721	-0.732	-0.748	-0.777
	677	-0.640	-0.633	-0.622	-0.621	-0.632	-0.639	-0.670
Main stage	697	-0.466	-0.424	-0.414	-0.409	-0.420	-0.429	-0.463
	737	-0.358	-0.330	-0.314	-0.305	-0.314	-0.329	-0.363
	777	-0.252	-0.222	-0.208	-0.201	-0.210	-0.216	-0.255
Transition	785	-0.244	-0.216	-0.204	-0.201	-0.208	-0.216	-0.257
	817	-0.141	-0.116	-0.104	-0.104	-0.108	-0.109	-0.143
	857	-0.068	-0.024	-0.004	-0.004	-0.005	-0.009	-0.037
Rise	877	-0.048	-0.021	-0.009	-0.001	-0.009	-0.013	-0.037
	897	-0.050	-0.024	-0.011	-0.002	-0.010	-0.012	-0.035
	917	-0.057	-0.029	-0.016	-0.005	-0.015	-0.019	-0.041
Main stage	957	-0.063	-0.036	-0.024	-0.015	-0.025	-0.028	-0.050
	977	-0.130	-0.105	-0.089	-0.072	-0.087	-0.097	-0.128
	997	-0.130	-0.105	-0.089	-0.072	-0.087	-0.097	-0.128

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 304 - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

C_p for -																
$\beta = 0^\circ$																
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$									
Nose	.461	.816	.733	.669	.608	.535	.468	.366	.461	.775	.715	.657	.601	.543	.475	.366
	.471	.668	.581	.520	.459	.394	.326	.235	.471	.597	.536	.485	.441	.383	.321	.222
Upper stage	.481	.652	.576	.515	.453	.386	.315	.222	.481	.618	.558	.507	.463	.405	.347	.248
	.489	.649	.573	.512	.450	.383	.312	.219	.489	.626	.566	.515	.471	.413	.355	.256
Transition Flare	.554	.859	.776	.715	.654	.593	.532	.430	.554	.691	.630	.579	.535	.477	.419	.320
	.558	.863	.780	.719	.658	.597	.536	.434	.558	.695	.634	.583	.539	.481	.423	.324
Main stage	.897	.933	.914	.890	.866	.842	.818	.794	.897	.931	.912	.888	.864	.840	.816	.792
	.897	.933	.914	.890	.866	.842	.818	.794	.897	.931	.912	.888	.864	.840	.816	.792

C_p for -																
$\beta = -30^\circ$																
$x/2$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$									
Nose	.461	.775	.715	.657	.601	.543	.475	.366	.461	.775	.715	.657	.601	.543	.475	.366
	.471	.597	.536	.485	.441	.383	.321	.222	.471	.597	.536	.485	.441	.383	.321	.222
Upper stage	.481	.618	.558	.507	.463	.405	.347	.248	.481	.626	.566	.515	.471	.413	.355	.256
	.489	.626	.566	.515	.471	.413	.355	.256	.489	.634	.574	.523	.479	.421	.363	.264
Transition Flare	.554	.691	.630	.579	.535	.477	.419	.320	.554	.695	.634	.583	.539	.481	.423	.324
	.558	.695	.634	.583	.539	.481	.423	.324	.558	.699	.638	.587	.543	.485	.427	.328
Main stage	.897	.931	.912	.888	.864	.840	.816	.792	.897	.931	.912	.888	.864	.840	.816	.792
	.897	.931	.912	.888	.864	.840	.816	.792	.897	.931	.912	.888	.864	.840	.816	.792

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10°

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TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 3A - Continued

(c) $M = 0.80$; $\alpha = -10^\circ$ to 10° - Concluded

C_p for $\gamma = -60^\circ$									
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
	Nozzle	.461	.519	.577	.594	.608	.587	.561	.496
	Upper stage	.481	.210	.253	.267	.277	.268	.241	.187
		.489	-.648	-.665	-.525	-.370	-.448	-.571	-.717
	Upper stage	.509	-.424	-.391	-.414	-.339	-.379	-.411	-.428
	Transition	.529	-.010	-.007	-.127	-.213	-.184	-.066	-.041
		.549	.378	.365	.207	.002	.115	.298	.339
	Flare	.558	.293	.337	.294	.093	.219	.316	.262
	Transition	.568	-.876	-1.008	-1.131	-.665	-1.065	-1.032	-.888
		.587	-.408	-.245	-.146	-.132	-.142	-.235	-.424
	Main stage	.607	-.125	-.076	-.066	-.063	-.069	-.081	-.136
		.627	-.102	-.053	-.043	-.040	-.046	-.062	-.117
	.657	-.105	-.050	-.031	-.026	-.031	-.054	-.121	
	Main stage	.697	-.098	-.039	-.023	-.016	-.023	-.044	-.109
		.737	-.085	-.032	-.015	-.009	-.014	-.035	-.100
	.777	-.080	-.028	-.011	-.007	-.010	-.031	-.095	
	Main stage	.785	-.085	-.031	-.012	-.008	-.010	-.031	-.092
		.817	-.068	-.020	-.004	-.000	-.004	-.023	-.079
	.857	-.071	-.025	-.009	-.006	-.009	-.028	-.083	
.897	-.073	-.028	-.013	-.009	-.013	-.031	-.086		

C_p for $\gamma = -90^\circ$									
x/l		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	
	Nozzle	.461	.501	.561	.608	.616	.561	.403	
	Upper stage	.471	.364	.416	.452	.416	.416	.273	
		.481	.193	.238	.273	.293	.238	.113	
	Upper stage	.489	-.572	-.372	-.386	-.312	-.347	-.572	
		.494	-.489	-.347	-.347	-.322	-.347	-.489	
	.499	-.474	-.358	-.358	-.358	-.345	-.345	-.474	
	Upper stage	.509	-.435	-.349	-.354	-.349	-.349	-.435	
		.519	-.309	-.291	-.301	-.291	-.291	-.309	
	.529	-.144	-.131	-.195	-.201	-.195	-.131	-.144	
	Upper stage	.539	-.010	-.016	-.086	-.084	-.084	-.010	
		.549	.140	.107	.041	.019	.019	.140	
	.554	.239	.199	.151	.206	.151	.206	.239	
	Transition	.568	-1.013	-.782	-.776	-.222	-.782	-.765	
	Transition	.577	-.426	-.222	-.205	-.414	-.222	-.673	
		.587	-.181	-.146	-.128	-.146	-.146	-.412	
	Transition	.597	-.104	.096	.086	.085	.096	.209	
		.607	-.081	.077	.083	.083	.077	.081	
	.617	-.066	.061	.061	.052	.061	.061	-.066	
	Transition	.627	-.094	.050	.040	.050	.050	-.094	
		.637	-.087	.043	.040	.040	.040	.087	
	.647	-.079	.035	.032	.032	.038	.038	-.079	
	Main stage	.657	-.051	.029	.024	.029	.029	-.051	
		.667	-.044	.024	.024	.024	.024	.078	
	.677	-.078	-.044	.024	.024	.024	.024	-.078	
	Main stage	.687	-.072	.024	.019	.024	.024	-.072	
		.697	-.066	.019	.019	.019	.019	.066	
	.707	-.054	-.033	.019	.019	.019	.019	-.054	
	Main stage	.717	-.054	.013	.009	.013	.013	-.054	
		.727	-.025	.008	.008	.008	.008	.047	
	.737	-.020	.004	.008	.004	.008	.004	-.020	
	Main stage	.747	-.017	.004	.004	.004	.004	-.017	
		.757	-.044	.004	.004	.004	.004	.044	
	.767	-.039	-.039	.005	.005	.005	.005	-.039	
	Main stage	.777	-.039	.005	.005	.005	.005	-.039	
		.787	-.018	.005	.005	.005	.005	.018	
	.797	-.038	-.038	.009	.009	.009	.009	-.038	
	Main stage	.807	-.017	.009	.009	.009	.009	-.017	
		.817	-.018	.011	.011	.011	.011	.018	
	.827	-.039	-.039	.016	.016	.016	.016	-.039	
	Main stage	.837	-.023	.016	.016	.016	.016	-.023	
		.847	-.035	.022	.022	.022	.022	.035	
	.857	-.135	-.106	-.093	-.085	-.085	-.093	-.135	

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 324 - Continued

(d) $M = 1.00$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for - $\beta = -60^\circ$						C_p for - $\beta = -30^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
Main stage	Rose	.461	.791	.770	.736	.698	.649	.554	.715	.737	.739	.727	.705
	Upper stage	.471	.664	.634	.603	.568	.522	.438	.437	.451	.452	.441	.427
	Upper stage	.481	.513	.474	.446	.414	.380	.305	.398	.398	.423	.425	.379
	Upper stage	.489	.562	.496	.468	.436	.406	.361	.629	.621	.523	.825	.899
Transition	Rose	.494	.525	.496	.468	.436	.406	.361	.629	.621	.523	.825	.899
	Upper stage	.499	.504	.474	.446	.414	.380	.305	.455	.389	.360	.350	.365
	Upper stage	.509	.412	.389	.361	.328	.298	.268	.418	.389	.360	.350	.365
	Upper stage	.519	.269	.282	.314	.305	.328	.368	.129	.191	.229	.164	.136
Flare	Rose	.529	.091	.163	.229	.176	.175	.231	.159	.191	.229	.164	.136
	Upper stage	.539	.377	.195	.146	.109	.117	.139	.335	.605	.061	.012	.069
	Upper stage	.549	.375	.414	.040	.045	.093	.106	.143	.605	.061	.012	.069
	Upper stage	.554	.665	.609	.105	.012	.043	.238	.470	.172	.042	.114	.308
Main stage	Rose	.568	-1.031	-.840	-.671	-.759	-.889	-1.051	-1.068	-.804	-.668	-.798	-1.063
	Upper stage	.577	-.745	-.505	-.348	-.390	-.544	-.853	-.635	-.365	-.290	-.369	-.508
	Upper stage	.587	-.519	-.401	-.311	-.326	-.416	-.713	-.440	-.249	-.217	-.247	-.457
	Upper stage	.597	-.382	-.258	-.220	-.241	-.258	-.277	-.278	-.175	-.159	-.173	-.264
Main stage	Rose	.607	-.333	-.209	-.186	-.207	-.215	-.216	-.257	-.122	-.116	-.124	-.230
	Upper stage	.617	-.315	-.192	-.159	-.183	-.188	-.200	-.183	-.122	-.116	-.124	-.230
	Upper stage	.627	-.275	-.145	-.134	-.158	-.166	-.191	-.151	-.122	-.116	-.124	-.230
	Upper stage	.637	-.275	-.145	-.134	-.158	-.166	-.191	-.151	-.122	-.116	-.124	-.230
Main stage	Rose	.647	-.195	-.113	-.111	-.124	-.146	-.190	-.191	-.087	-.079	-.089	-.120
	Upper stage	.657	-.167	-.096	-.093	-.106	-.126	-.165	-.114	-.087	-.079	-.089	-.120
	Upper stage	.667	-.139	-.078	-.075	-.087	-.107	-.140	-.094	-.069	-.062	-.069	-.098
	Upper stage	.677	-.133	-.084	-.081	-.067	-.083	-.113	-.075	-.048	-.045	-.043	-.080
Main stage	Rose	.777	-.113	-.064	-.042	-.037	-.064	-.094	-.076	-.038	-.038	-.034	-.074
	Upper stage	.785	-.112	-.061	-.036	-.024	-.061	-.088	-.049	-.011	-.026	-.008	-.060
	Upper stage	.817	-.087	-.013	-.027	-.006	-.050	-.069	-.000	-.017	-.029	-.015	-.053
	Upper stage	.857	-.071	-.006	-.017	-.015	-.024	-.036	.002	.021	.027	.015	.002
Main stage	Rose	.877	-.024	.024	.029	.019	.003	.010	.002	.021	.027	.015	.002
	Upper stage	.897	-.016	.013	.027	.017	.013	.003	.002	.021	.027	.015	.002
	Upper stage	.917	-.019	.006	.021	.010	.001	.003	.002	.021	.027	.015	.002
	Upper stage	.957	-.019	.002	.012	-.003	-.001	.002	.002	.021	.027	.015	.002
Main stage	Rose	.997	-.095	-.087	-.106	-.122	-.127	-.148	.002	.021	.027	.015	.002

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 304 - Continued

		C_p for $\beta = 0^\circ$						C_p for $\beta = -30^\circ$						NO 180					
		$\alpha = 0^\circ$						$\alpha = 0^\circ$						$\alpha = 0^\circ$					
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$
x/t																			
Main stage	Nose	.461	.992	.929	.872	.803	.740	.461	.971	.921	.869	.811	.751	.461	.971	.921	.869	.811	.751
	Upper stage	.471	.869	.813	.756	.696	.632	.471	.896	.841	.795	.746	.693	.471	.896	.841	.795	.746	.693
Transition	Flare	.481	.797	.724	.625	.521	.416	.481	.763	.711	.669	.622	.575	.481	.763	.711	.669	.622	.575
	Upper stage	.494	.489	.499	.510	.521	.532	.494	.594	.575	.554	.532	.510	.494	.594	.575	.554	.532	.510
Main stage	Nose	.509	.442	.498	.547	.430	.303	.509	.472	.438	.403	.366	.322	.509	.472	.438	.403	.366	.322
	Upper stage	.519	.452	.468	.445	.403	.311	.519	.452	.438	.403	.366	.322	.519	.452	.438	.403	.366	.322
Transition	Flare	.529	.436	.432	.410	.372	.240	.529	.432	.410	.372	.240	.201	.529	.432	.410	.372	.240	.201
	Upper stage	.539	.448	.432	.410	.372	.240	.539	.448	.432	.410	.372	.240	.539	.448	.432	.410	.372	.240
Main stage	Nose	.549	.516	.418	.292	.145	.102	.549	.483	.372	.273	.140	.039	.549	.483	.372	.273	.140	.039
	Upper stage	.554	.493	.470	.473	.403	.268	.554	.493	.470	.473	.403	.268	.554	.493	.470	.473	.403	.268
Transition	Flare	.558	.538	.477	.717	.175	.089	.558	.582	.743	.546	.137	.063	.558	.582	.743	.546	.137	.063
	Upper stage	.568	.607	.604	.609	.588	.455	.568	.615	.577	.555	.509	.558	.568	.615	.577	.555	.509	.558
Main stage	Nose	.577	.398	.425	.438	.235	.181	.577	.396	.385	.384	.221	.275	.577	.396	.385	.384	.221	.275
	Upper stage	.587	.255	.295	.316	.194	.189	.587	.268	.295	.297	.202	.224	.587	.268	.295	.297	.202	.224
Transition	Flare	.597	.109	.187	.235	.183	.172	.597	.135	.162	.151	.132	.140	.597	.135	.162	.151	.132	.140
	Upper stage	.607	.066	.138	.168	.151	.148	.607	.098	.151	.135	.118	.154	.607	.098	.151	.135	.118	.154
Main stage	Nose	.617	.052	.132	.113	.148	.118	.617	.082	.124	.111	.111	.181	.617	.082	.124	.111	.111	.181
	Upper stage	.627	.038	.111	.091	.124	.118	.627	.074	.111	.111	.111	.181	.627	.074	.111	.111	.111	.181
Transition	Flare	.637	.028	.084	.069	.099	.091	.637	.063	.092	.084	.129	.151	.637	.063	.092	.084	.129	.151
	Upper stage	.647	.044	.070	.065	.069	.057	.647	.059	.056	.051	.102	.116	.647	.059	.056	.051	.102	.116
Main stage	Nose	.657	.036	.042	.046	.051	.032	.657	.035	.038	.037	.068	.088	.657	.035	.038	.037	.068	.088
	Upper stage	.667	.034	.037	.031	.033	.023	.667	.035	.038	.037	.068	.088	.667	.035	.038	.037	.068	.088
Transition	Flare	.677	.015	.026	.026	.035	.029	.677	.026	.026	.026	.042	.053	.677	.026	.026	.026	.042	.053
	Upper stage	.687	.018	.017	.012	.029	.026	.687	.016	.016	.016	.026	.034	.687	.016	.016	.016	.026	.034
Main stage	Nose	.697	.004	.004	.002	.009	.009	.697	.004	.004	.004	.009	.018	.697	.004	.004	.004	.009	.018
	Upper stage	.707	.007	.004	.003	.004	.008	.707	.007	.004	.003	.008	.018	.707	.007	.004	.003	.008	.018
Transition	Flare	.717	.002	.002	.002	.007	.007	.717	.002	.002	.002	.007	.018	.717	.002	.002	.002	.007	.018
	Upper stage	.727	.002	.002	.002	.007	.007	.727	.002	.002	.002	.007	.018	.727	.002	.002	.002	.007	.018
Main stage	Nose	.737	.002	.002	.002	.007	.007	.737	.002	.002	.002	.007	.018	.737	.002	.002	.002	.007	.018
	Upper stage	.747	.002	.002	.002	.007	.007	.747	.002	.002	.002	.007	.018	.747	.002	.002	.002	.007	.018
Transition	Flare	.757	.002	.002	.002	.007	.007	.757	.002	.002	.002	.007	.018	.757	.002	.002	.002	.007	.018
	Upper stage	.767	.002	.002	.002	.007	.007	.767	.002	.002	.002	.007	.018	.767	.002	.002	.002	.007	.018
Main stage	Nose	.777	.002	.002	.002	.007	.007	.777	.002	.002	.002	.007	.018	.777	.002	.002	.002	.007	.018
	Upper stage	.787	.002	.002	.002	.007	.007	.787	.002	.002	.002	.007	.018	.787	.002	.002	.002	.007	.018
Transition	Flare	.797	.002	.002	.002	.007	.007	.797	.002	.002	.002	.007	.018	.797	.002	.002	.002	.007	.018
	Upper stage	.807	.002	.002	.002	.007	.007	.807	.002	.002	.002	.007	.018	.807	.002	.002	.002	.007	.018
Main stage	Nose	.817	.002	.002	.002	.007	.007	.817	.002	.002	.002	.007	.018	.817	.002	.002	.002	.007	.018
	Upper stage	.827	.002	.002	.002	.007	.007	.827	.002	.002	.002	.007	.018	.827	.002	.002	.002	.007	.018
Transition	Flare	.837	.002	.002	.002	.007	.007	.837	.002	.002	.002	.007	.018	.837	.002	.002	.002	.007	.018
	Upper stage	.847	.002	.002	.002	.007	.007	.847	.002	.002	.002	.007	.018	.847	.002	.002	.002	.007	.018
Main stage	Nose	.857	.002	.002	.002	.007	.007	.857	.002	.002	.002	.007	.018	.857	.002	.002	.002	.007	.018
	Upper stage	.867	.002	.002	.002	.007	.007	.867	.002	.002	.002	.007	.018	.867	.002	.002	.002	.007	.018
Transition	Flare	.877	.002	.002	.002	.007	.007	.877	.002	.002	.002	.007	.018	.877	.002	.002	.002	.007	.018
	Upper stage	.887	.002	.002	.002	.007	.007	.887	.002	.002	.002	.007	.018	.887	.002	.002	.002	.007	.018
Main stage	Nose	.897	.002	.002	.002	.007	.007	.897	.002	.002	.002	.007	.018	.897	.002	.002	.002	.007	.018
	Upper stage	.907	.002	.002	.002	.007	.007	.907	.002	.002	.002	.007	.018	.907	.002	.002	.002	.007	.018
Transition	Flare	.917	.002	.002	.002	.007	.007	.917	.002	.002	.002	.007	.018	.917	.002	.002	.002	.007	.018
	Upper stage	.927	.002	.002	.002	.007	.007	.927	.002	.002	.002	.007	.018	.927	.002	.002	.002	.007	.018
Main stage	Nose	.937	.002	.002	.002	.007	.007	.937	.002	.002	.002	.007	.018	.937	.002	.002	.002	.007	.018
	Upper stage	.947	.002	.002	.002	.007	.007	.947	.002	.002	.002	.007	.018	.947	.002	.002	.002	.007	.018
Transition	Flare	.957	.002	.002	.002	.007	.007	.957	.002	.002	.002	.007	.018	.957	.002	.002	.002	.007	.018
	Upper stage	.967	.002	.002	.002	.007	.007	.967	.002	.002	.002	.007	.018	.967	.002	.002	.002	.007	.018
Main stage	Nose	.977	.002	.002	.002	.007	.007	.977	.002	.002	.002	.007	.018	.977	.002	.002	.002	.007	.018
	Upper stage	.987	.002	.002	.002	.007	.007	.987	.002	.002	.002	.007	.018	.987	.002	.002	.002	.007	.018
Transition	Flare	.997	.002	.002	.002	.007	.007	.997	.002	.002	.002	.007	.018	.997	.002	.002	.002	.007	.018
	Upper stage	.997	.002	.002	.002	.007	.007	.997	.002	.002	.002	.007	.018	.997	.002	.002	.002	.007	.018

TABLE 12.- PRESSURE COEFFICIENTS FOR CONFIGURATION 304 - Concluded

(e) $M = 1.20$; $\alpha = -10^\circ$ to 10° - Concluded

x/l		C_p for - $\beta = -60^\circ$							C_p for - $\beta = -90^\circ$							NO 120	
		$\alpha = -10^\circ$							$\alpha = -10^\circ$								
		$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$	$\alpha = -10^\circ$	$\alpha = -6^\circ$	$\alpha = -3^\circ$	$\alpha = 0^\circ$	$\alpha = 3^\circ$	$\alpha = 6^\circ$	$\alpha = 10^\circ$		
Nose		.461	.910	.516	.895	.869	.830	.777	.682	.461	.779	.840	.867	.859	.835	.769	
		.471	.802	.795	.777	.751	.714	.669	.580	.481	.560	.606	.622	.617	.596	.546	
		.489	.671	.663	.645	.622	.590	.554	.477	.489	.606	.605	.621	.602	.596	.593	
		.494	.530	.532	.537	.550	.561	.555	.448	.489	.606	.605	.621	.617	.596	.546	
Upper stage		.499	.573	.599	.618	.633	.609	.495	.219	.489	.606	.605	.621	.617	.596	.546	
		.494	.410	.477	.501	.552	.452	.322	.224	.509	.261	.246	.222	.169	.210	.194	
		.509	.182	.236	.211	.126	.159	.221	.238	.509	.261	.246	.222	.169	.210	.194	
		.519	.112	.113	.062	.026	.084	.151	.213	.509	.261	.246	.222	.169	.210	.194	
Upper stage		.529	.157	.190	.087	.053	.026	.067	.140	.529	.033	.017	.056	.061	.031	.031	
		.539	.382	.285	.172	.107	.066	.010	.015	.549	.236	.193	.164	.218	.243	.205	
		.549	.442	.337	.264	.170	.112	.069	.078	.549	.236	.193	.164	.218	.243	.205	
		.554	.750	.639	.465	.234	.319	.327	.399	.558	.665	.602	.236	.490	.616	.621	
Transition		.568	.652	.615	.555	.517	.569	.604	.691	.568	.682	.621	.566	.569	.617	.682	
		.577	.454	.423	.366	.254	.324	.452	.593	.587	.410	.355	.263	.308	.365	.441	
		.587	.302	.306	.287	.216	.243	.265	.389	.587	.410	.355	.263	.308	.365	.441	
		.597	.226	.241	.230	.189	.189	.265	.389	.607	.296	.227	.162	.173	.243	.316	
Main stage		.607	.185	.195	.178	.161	.162	.183	.229	.607	.296	.227	.162	.173	.243	.316	
		.617	.174	.168	.138	.140	.135	.145	.170	.627	.261	.124	.111	.107	.132	.276	
		.627	.171	.143	.111	.121	.118	.126	.140	.627	.261	.124	.111	.107	.132	.276	
		.637	.152	.105	.084	.091	.094	.096	.126	.657	.161	.080	.055	.057	.087	.154	
Main stage		.647	.142	.067	.056	.053	.058	.079	.119	.657	.161	.080	.055	.057	.087	.154	
		.657	.110	.066	.044	.041	.052	.065	.097	.697	.162	.091	.056	.062	.088	.161	
		.667	.110	.058	.034	.034	.036	.063	.071	.697	.162	.091	.056	.062	.088	.161	
		.677	.076	.047	.032	.017	.030	.046	.058	.737	.135	.071	.042	.038	.074	.138	
Main stage		.737	.066	.044	.032	.017	.030	.046	.058	.777	.096	.055	.030	.029	.060	.110	
		.785	.064	.044	.023	.010	.021	.034	.057	.777	.096	.055	.030	.029	.060	.110	
		.817	.058	.025	.012	.017	.018	.035	.048	.785	.106	.058	.030	.028	.057	.114	
		.857	.066	.020	.014	.011	.021	.033	.045	.817	.086	.031	.015	.019	.044	.090	
Main stage		.877	.055	.033	.009	.004	.008	.023	.045	.857	.087	.032	.018	.020	.053	.087	
		.897	.066	.029	.011	.001	.004	.019	.030	.897	.091	.040	.018	.008	.028	.070	
		.917	.070	.032	.017	.008	.011	.023	.027	.917	.091	.040	.018	.008	.028	.070	
		.957	.069	.037	.015	.015	.019	.021	.029	.957	.091	.040	.018	.008	.028	.070	
Main stage		.997	.060	.047	.041	.054	.062	.086	.105	.997	.091	.040	.018	.008	.028	.070	

TABLE 13.- PRESSURE COEFFICIENTS FOR CONFIGURATION 133

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = 0^\circ$

$x/2$	C_p for -									
	$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$
Nose	.089 .209 .176 .144 .045 .043 .180 .089 .202 .089 .024 .126 .318 .001 .079 .010 .247 .767 .213 .134 .100 .089 .066 .627 .617 .577 .677 .697 .737 .777 .785 .817 .857 .877 .897	.580 .234 .201 .162 .061 .040 .176 .888 .229 .097 .029 .144 .340 .012 .091 .000 .258 .953 .224 .132 .097 .063 .051 .040 .031 .019 .027 .023 .019 .017 .011 .009 .009 .008 .010 .010 .014	.709 .251 .219 .184 .086 .022 .158 -1.078 -1.095 -1.043 -1.067 -1.360 -1.024 -1.123 -1.019 -1.238 -1.078 -1.224 -1.123 -1.086 -1.058 -1.049 -1.040 -1.031 -1.019 -1.016 -1.011 -1.008 -1.003 -1.002 -1.001 -1.003 -1.004 -1.003 -1.003 -1.006	.763 .259 .227 .186 .093 -0.009 -1.138 -1.205 -1.311 -1.110 -0.050 .175 .360 .024 .135 .036 -1.207 -1.252 -1.131 -0.993 -0.668 -0.555 -0.47 -0.34 -0.23 -0.18 -0.14 -0.12 -0.11 -0.10 -0.09 -0.08 -0.07 -0.06 -0.05 -0.07	.820 .272 .242 .197 .100 .010 -0.097 -1.116 -1.399 -1.179 -0.053 .184 .358 .025 .159 .063 -1.160 -1.281 -1.256 -1.117 -0.86 -0.667 -0.55 -0.44 -0.32 -0.21 -0.19 -0.13 -0.10 -0.06 -0.01 -0.02 -0.01 -0.05 -0.04 -0.08	.844 .273 .242 .204 .113 .033 -0.055 -0.965 -1.462 -1.268 -0.016 .171 .326 .016 .189 .097 -1.103 -1.128 -1.131 -0.959 -0.596 -0.56 -0.52 -0.45 -0.35 -0.32 -0.28 -0.27 -0.21 -0.17 -0.07 -0.01 -0.02 -0.01 -0.02 -0.02 -0.02 -0.024	.785 .304 .271 .235 .152 .080 .004 -0.828 -1.485 -1.261 -0.053 .297 .351 .031 .245 .155 -0.036 -0.981 -0.784 -0.550 -0.097 -0.009 -0.03 -0.06 -0.09 -0.12 -0.16 -0.15 -0.15 -0.10 -0.04 -0.06 -0.10 -0.09 -0.12 -0.12	.863 .328 .297 .259 .184 .125 .062 -0.713 -1.595 -1.671 -1.219 -0.081 .055 .187 .028 .292 .216 -0.28 -0.845 -0.648 -0.516 -0.435 -0.371 -0.290 -0.132 -0.26 -0.23 -0.24 -0.15 -0.03 -0.07 -0.01 -0.06 -0.12 -0.02 -0.01 -0.02 -0.02 -0.016	.912 .377 .350 .318 .246 .189 .135 -0.595 -1.671 -1.199 -0.027 .060 .161 .040 .344 .292 .116 -0.717 -0.523 -0.403 -0.338 -0.289 -0.243 -0.203 -0.166 -0.131 -0.105 -0.084 -0.069 -0.056 -0.048 -0.015 -0.042 -0.035 -0.012 -0.005 -0.025	1.052 .307 .315 .307 .304 .291 .366 -0.284 -0.325 -0.251 .114 .243 .047 .428 .409 .304 -0.397 -0.312 -0.246 -0.207 -0.172 -0.144 -0.122 -0.092 -0.073 -0.048 -0.038 -0.040 -0.025 -0.015 -0.022 -0.04 -0.01 -0.005
Upper stage										
Transition										
Main stage										

TABLE 13.- PRESSURE COEFFICIENTS FOR CONFIGURATION 133 - Continued

(b) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -30^\circ$

x/l	C_p for -									
	$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$
Nose	.209 .166 .133 .045 -.043 -.178 -.750 -.491	.223 .189 .156 .056 -.045 -.170 -.882	.246 .210 .179 .077 -.026 -.158 -1.023	.255 .223 .186 .085 -.013 -.138 -1.110	.265 .231 .193 .100 .006 -.101 -1.063	.267 .235 .200 .109 .033 -.055 -.944	.298 .268 .235 .149 .080 .004 -.838	.322 .290 .256 .181 .122 .059 -.713	.368 .344 .312 .243 .189 .135 -.598	.364 .310 .310 .304 .304 .288 -.290
Upper stage	-.213 -.078 .024 .126 .318 .180 .035 -.010 -.259 -.643 -.213 -.134 -.100 -.078 -.066 -.066 -.055 -.021 -.021 -.017 -.013 -.012 -.015 -.018 -.018 -.030 -.081	-.241 -.086 .029 .150 .334 .204 .046 .000 -.270 -.769 -.224 -.137 -.097 -.074 -.063 -.051 -.040 -.029 -.017 -.019 -.015 -.009 -.006 -.008 -.011 -.012 -.014 -.014 -.025 -.080	-.270 -.095 .047 .171 .350 .236 .074 .019 -.251 -1.074 -.219 -.127 -.077 -.058 -.049 -.031 -.023 -.010 -.011 -.006 -.003 -.002 -.000 -.004 -.004 -.006 -.006 -.018 -.018 -.050	-.344 -.122 .054 .180 .351 .247 .086 .036 -.219 -1.325 -.231 -.135 -.084 -.068 -.055 -.047 -.034 -.025 -.014 -.015 -.009 -.006 -.002 -.001 -.005 -.006 -.007 -.008 -.019 -.077	-.426 -.225 .053 .188 .351 .265 .109 .063 -.171 -1.277 -.225 -.121 -.082 -.067 -.052 -.044 -.036 -.024 -.012 -.013 -.008 -.004 -.001 -.002 -.006 -.006 -.008 -.020 -.077	-.434 -.326 -.041 .164 .301 .285 .140 .097 -.121 -1.118 -.765 -.117 -.533 -.070 -.009 -.006 -.009 -.012 -.016 -.009 -.015 -.012 -.005 -.017 -.017 -.021 -.022 -.024 -.025 -.036 -.096	-.417 -.308 -.074 .127 .273 .329 .195 .152 -.053 -.964 -.767 -.533 -.070 -.009 -.006 -.009 -.012 -.016 -.009 -.015 -.012 -.005 -.004 -.006 -.011 -.012 -.013 -.013 -.017 -.089	-.397 -.268 -.110 .045 .171 .378 .267 .206 .016 -.822 -.622 -.510 -.332 -.368 -.293 -.132 -.039 .020 .030 .014 -.001 -.002 -.001 -.006 -.013 -.014 -.017 -.104	-.434 -.209 -.073 .050 .143 .444 .359 .268 .092 -.690 -.465 -.381 -.246 -.152 -.169 -.144 -.125 -.098 -.134 -.099 -.085 -.042 -.037 -.020 -.047 -.009 -.021 -.002 -.034 -.023 -.088	-.369 -.342 -.240 .122 .240 -.22 .439 .406 .298 -.386 -.314 -.246 -.152 -.169 -.144 -.125 -.098 -.066 -.040 -.037 -.020 -.009 -.042 -.037 -.009 -.009 -.002 -.004 -.006 -.007 -.007 -.017 -.029 -.023 -.017 -.055
Transi- tion										
Main stage										

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(c) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -60^\circ$

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TABLE 13.- PRESSURE COEFFICIENTS FOR CONFIGURATION 133 - Concluded

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -90^\circ$

	x/l	C_p for -									
		$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$
Nose	.420	.242	.267	.286	.296	.310	.315	.340	.366	.413	.302
	.430	.012	.513	.660	.719	.782	.877	.743	.813	.871	1.012
	.450	.133	.150	.170	.178	.190	.193	.225	.253	.309	.302
	.470	.034	.056	.077	.089	.104	.113	.149	.184	.246	.310
	.485	-.200	-.193	-.181	-.159	-.120	-.080	-.016	.037	.111	.272
	.491	-.772	-.865	-.992	-1.089	-1.017	-.890	-.750	-.643	-.525	-.222
	.511	.024	.035	.047	.054	.057	-.041	-.101	-.123	-.064	-.254
	.531	.341	.368	.373	.368	.352	.304	.249	.148	.146	.243
Upper stage	.552	-.010	.000	.019	.032	.063	.097	.152	.197	.277	.405
Transition	.568	-.767	-.970	-1.166	-1.367	-1.312	-1.150	-.998	-.851	-.726	-.303
	.587	-.134	-.137	.132	-.135	-.121	-.124	-.539	-.513	-.400	-.251
	.607	-.078	-.074	.058	-.068	-.067	-.056	-.012	-.371	-.289	-.172
	.627	-.066	-.051	-.040	-.047	.044	.052	-.012	-.126	-.203	-.120
	.657	-.033	-.029	-.023	-.025	.024	-.037	-.016	.020	-.133	-.051
	.697	-.025	-.019	-.013	-.015	-.015	.030	-.016	.012	-.087	-.046
	.737	-.017	-.015	-.005	-.009	-.008	-.023	-.011	.000	-.060	-.039
	.777	-.013	-.011	-.001	-.005	-.005	-.019	-.008	-.005	-.053	-.021
	.785	-.013	-.009	-.001	-.006	.004	-.018	-.009	-.006	.050	-.017
	.817	-.011	-.005	.002	.000	-.000	-.015	.003	-.004	-.038	-.012
	.857	-.015	-.011	-.003	-.005	-.005	-.020	-.010	-.013	-.032	-.013
Main stage	.897	-.018	-.014	-.005	-.007	-.008	-.023	-.012	-.017	.025	-.007

TABLE 14.-- PRESSURE COEFFICIENTS FOR CONFIGURATION 143

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = 0^\circ$

x/l	C_p for --										
	$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$	
Nose	-.257 .430 .430 .460 .470 .490 .500 .505 .511 .516 .521 .531	.393 .243 .215 .176 .087 .000 -.112 -.638 -.113 -.046 .050 .314	.561 .264 .237 .193 .104 .015 -.108 -.852 -.118 .061 .318	.634 .269 .237 .201 .107 .018 -.098 -.943 -.136 .056 .299	.705 .278 .248 .207 .121 .035 -.067 -.894 -.184 .021 .256	.765 .290 .259 .224 .140 .063 -.028 -.823 -.201 -.043 .173	.827 .314 .281 .245 .169 .100 .133 .065 -.716 -.148 -.087 .103	.871 .329 .304 .267 .192 .100 .133 .065 -.716 -.148 -.087 .064	.928 .377 .353 .315 .249 .196 .133 .066 -.606 -.090 -.037 .085	1.109 .320 .330 .322 .317 .320 .301 .291 -.359 -.312 -.155	
Upper stage											
Transi- tion flap	.011 .056 -.022 -.259 -.767 -.214 -.135 -.101 -.079 -.067 -.056 -.045 -.019 -.019 -.015 -.011 -.007 -.003 -.002 -.005 -.007	.021 .077 -.014 -.266 -.960 -.220 -.128 -.094 -.065 -.054 -.036 -.018 -.016 -.010 -.008 -.004 -.003 -.001 -.003 -.002 -.004	.029 .096 .006 -.245 -.116 -.228 -.127 -.086 -.063 -.049 -.035 -.026 -.018 -.013 -.008 -.005 -.001 -.005 -.002 -.003 -.000	.027 .117 .018 -.215 -.1340 -.257 -.136 -.090 -.069 -.052 -.044 -.031 -.020 -.011 -.008 -.002 -.001 -.001 -.002 -.001 -.004	.028 .142 .051 -.164 -.1292 -.284 -.118 -.087 -.072 -.056 -.049 -.037 -.024 -.020 -.014 -.013 -.007 -.002 -.003 -.007 -.010	.032 .192 .096 -.107 -1.122 -.820 -.122 -.043 -.039 -.039 -.035 -.025 -.018 -.016 -.012 -.009 -.004 -.002 -.001 -.004 -.006	.032 .242 .155 -.032 -.979 -.803 -.660 -.212 -.012 -.017 -.011 -.006 -.010 -.010 -.011 -.007 -.000 -.002 -.006 -.006 -.009	.028 .284 .211 .031 -.857 -.690 -.491 -.421 -.353 -.225 -.048 .027 .035 .028 .006 -.003 -.002 -.004 -.011 -.006 -.015	.039 .344 .283 .114 -.734 -.575 -.467 -.397 -.338 -.283 -.237 -.191 -.147 -.117 -.093 -.075 -.062 -.052 -.048 -.052 -.050 -.049	.050 .108 .341 .282 -.405 -.337 -.255 -.219 -.181 -.151 -.127 -.097 -.077 -.051 -.040 -.038 -.022 -.014 -.019 -.001 -.002 -.003	

TABLE 4.- PRELIMINARY COEFFICIENTS FOR CONCENTRATION LOG - Continued

(1) $M = 1.00$ to 1.20 ; $\alpha = 10$; $\beta = 300$

Type of flow	$\log_{10} \frac{C}{C_0}$									
	$M = 1.00$	$M = 1.05$	$M = 1.10$	$M = 1.15$	$M = 1.20$	$M = 1.25$	$M = 1.30$	$M = 1.35$	$M = 1.40$	$M = 1.45$
None	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Up per flow	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Trans- ition flow	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Main at flow	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32
	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35
	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39

TABLE 14.- PRESSURE COEFFICIENTS FOR CONFIGURATION 143 - Continued

(c) $\gamma = 0.40$ to 1.20; $\alpha = 0^\circ$; $\beta = -60^\circ$

$x/2$	C_p for -									
	M = 0.40	M = 0.60	M = 0.70	M = 0.75	M = 0.80	M = 0.85	M = 0.90	M = 0.95	M = 1.00	M = 1.20
Nose	.219 .186 .153 .066 -.011 -.078 -.626	.231 .196 .165 .076 -.013 -.082 -.736	.255 .224 .193 .104 .010 -.076 -.748	.261 .229 .195 .107 .018 -.077 -.810	.271 .241 .203 .117 .031 -.079 -.783	.287 .255 .217 .133 .060 -.082 -.706	.304 .275 .242 .166 .094 -.089 -.634	.326 .295 .261 .186 .127 -.105 -.579	.374 .344 .315 .246 .190 -.113 -.497	.317 .322 .320 .314 .317 -.128 -.231
Upper stage	.101 .057 .328	.117 .061 .325	.127 .057 .286	.148 .031 .257	.176 -.029 .214	.194 -.075 .152	.182 -.100 .087	.154 -.097 .048	.093 -.044 .073	.383 -.145 -.133
Trailing flap	.156 .056 -.022 -.259 -.700 -.214 -.135 -.090 -.079 -.056 -.045 -.023 -.015 -.015 -.007 -.003 -.003 -.002 -.002 -.001 -.001 -.004 -.009 -.016 -.072	.184 .083 -.014 -.277 -.597 -.220 -.134 -.088 -.065 -.054 -.042 -.036 -.020 -.002 -.010 -.006 -.000 -.004 -.002 -.006 -.001 -.003 -.004 -.009 -.016 -.073	.209 .096 .006 -.255 -1.194 -.223 -.131 -.081 -.058 -.044 -.035 -.026 -.019 -.002 -.003 -.003 -.001 -.001 -.006 -.002 -.001 -.001 -.004 -.004 -.013 -.070	.228 .117 .023 -.224 -1.411 -.136 -.090 -.069 -.052 -.044 -.036 -.021 -.011 -.003 -.002 -.002 -.002 -.001 -.001 -.002 -.002 -.003 -.004 -.009 -.017 -.075	.249 .146 .051 -.176 -1.296 -.246 -.122 -.087 -.068 -.056 -.049 -.041 -.025 -.002 -.014 -.006 -.003 -.003 -.003 -.002 -.001 -.001 -.004 -.013 -.079	.280 .195 .100 -.115 -1.122 -.097 -.039 -.039 -.035 -.028 -.021 -.004 -.011 -.007 -.002 -.002 -.002 -.001 -.001 -.004 -.005 -.001 -.001 -.009 -.019 -.080	.292 .249 .159 -.040 -.972 -.796 -.660 -.188 -.009 -.017 -.014 .008 -.007 .006 -.009 -.009 -.005 -.004 -.001 -.001 -.007 -.009 -.015 -.021 -.089	.281 .290 .211 .022 -.841 .681 -.575 .491 -.417 -.335 -.283 -.243 -.197 -.148 -.060 -.092 -.073 -.058 -.055 -.046 -.046 -.053 -.012 -.013 -.015 -.020 -.027 -.104	.305 .344 .280 .105 -.716 -.562 -.470 -.397 -.335 -.283 -.243 -.197 -.148 -.060 -.092 -.073 -.058 -.055 -.046 -.046 -.053 -.012 -.013 -.015 -.020 -.027 -.104	.338 .416 .376 .281 -.380 -.323 -.260 -.217 -.178 -.148 -.129 -.102 -.057 -.010 -.046 -.035 -.017 -.008 -.016 -.011 -.001 -.001 -.005 -.013 -.030 -.083

TABLE 14.-- PRESSURE COEFFICIENTS FOR CONFIGURATION 143 - Concluded

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -90^\circ$

x/l	C_p for -										
	$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$	
Nose	.263 .257 .153 .066 -.145 -.626	.276 .382 .165 .081 -.139 -.713	.299 .548 .184 .104 -.130 -.775	.302 .618 .192 .107 -.118 -.848	.308 .690 .200 .121 -.090 -.852	.325 .747 .136 -.053 -.756	.347 .818 .238 .166 .001 -.654	.367 .865 .258 .192 .043 -.586	.413 .925 .312 .249 .112 -.494	.312 1.093 .314 .320 .280 -.231	
Upper stage	.531	.342	.318	.295	.253	.163	.093	.054	.079	.149	
Transi- tion flap	.552	-.014	.006	.018	.051	.100	.155	.211	.280	.378	
Main stage	.568 .587 .607 .627 .657 .697 .737 .777 .785 .817 .857 .897	-.994 -.134 -.065 -.042 -.022 -.012 -.006 -.006 -.002 -.003 -.003 -.005	-1.208 -.131 -.058 -.035 -.019 -.010 -.003 -.000 -.008 -.007 -.002 -.001	-1.432 -.136 -.069 -.044 -.021 -.012 -.005 -.002 -.002 -.003 -.002 -.005	-1.323 -.122 -.068 -.049 -.027 -.017 -.009 -.006 -.007 -.002 -.002 -.010	-1.151 -.104 -.039 -.035 -.022 -.013 -.005 -.003 -.002 -.001 -.004 -.007	-.999 -.667 -.009 -.014 -.009 -.012 -.009 -.005 -.005 -.000 -.007 -.007	-.867 -.584 -.417 -.225 -.023 -.026 -.008 -.001 -.004 -.001 -.011 -.015	-.740 -.476 -.335 -.237 -.149 -.094 -.072 -.058 -.056 -.044 -.052 -.048	-.410 -.263 -.178 -.127 -.058 -.044 -.039 -.019 -.013 -.011 -.007 -.005	

TABLE 15.- PRESSURE COEFFICIENTS FOR CONFIGURATION 153

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = 0^\circ$

C _p for -											
x/2	M = 0.40	M = 0.60	M = 0.70	M = 0.75	M = 0.80	M = 0.85	M = 0.90	M = 0.95	M = 1.00	M = 1.20	
Nose	.461	.260	.446	.532	.601	.658	.720	.778	.833	1.015	
	.471	.255	.273	.277	.287	.306	.320	.346	.397	.325	
	.481	.233	.237	.249	.265	.278	.294	.321	.370	.325	
	.491	.199	.211	.220	.231	.250	.265	.296	.344	.317	
	.511	.144	.153	.164	.175	.195	.215	.247	.299	.325	
	.521	.110	.122	.135	.141	.167	.186	.222	.278	.325	
	.525	.094	.109	.115	.130	.153	.176	.216	.269	.330	
	.532	.088	.104	.111	.126	.153	.176	.216	.275	.346	
	Upper stage										
Transition flare	.539	.016	.025	.031	.030	.035	.033	.033	.039	.051	
	.546	-.006	.011	.022	.041	.074	.109	.156	.216	.319	
	.552	-.069	-.053	-.036	-.008	.028	.069	.125	.186	.317	
	.562	-.298	-.268	-.224	-.174	-.104	-.038	.033	.102	.293	
	.568	-.763	-1.214	-1.471	-1.317	-1.145	-.996	-.863	-.738	-.400	
	.577	-.234	-.281	-.361	-.474	-.886	-.888	-.776	-.662	-.351	
	.587	-.144	-.144	-.148	-.178	-.291	-.740	-.655	-.551	-.291	
	.597	-.096	-.094	-.090	-.077	-.090	-.402	-.568	-.475	-.245	
	.607	-.069	-.071	-.069	-.054	-.018	-.092	-.488	-.401	-.209	
	.617	-.058	-.053	-.052	-.050	.014	.009	-.411	-.337	-.177	
Main stage	.627	-.046	-.043	-.044	-.043	.018	.031	.328	.279	-.150	
	.637	-.053	-.034	-.032	-.031	.018	.025	.126	.224	-.114	
	.657	-.032	-.022	-.021	-.022	-.014	.009	.035	-.165	-.090	
	.677	-.028	-.014	-.017	-.018	.013	-.003	.057	.125	-.058	
	.697	-.024	-.008	-.012	-.014	-.009	-.007	.050	-.096	-.040	
	.737	-.020	-.006	-.011	-.011	-.007	-.009	.021	-.074	-.040	
	.777	-.016	-.002	-.005	-.005	-.002	-.007	.008	-.057	-.022	
	.785	-.012	.004	.003	.001	.004	.001	.013	-.048	-.014	
	.817	-.011	.003	.002	.001	-.001	.004	.004	-.043	-.019	
	.857	-.012	-.001	-.002	-.003	.004	.000	-.004	-.040	.000	
	.877	-.012	-.001	-.002	-.004	.000	-.007	-.004	.012	.003	
	.897	-.015	-.002	-.004	-.005	-.007	-.011	-.008	.033	-.004	

TABLE 15.- PRESSURE COEFFICIENTS FOR CONFIGURATION 153 - Continued

(c) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\beta = -30^\circ$

x/l	C_p for -									
	$M = 0.40$	$M = 0.50$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$
Nose	0.71	.281	.264	.269	.265	.266	.214	.343	.308	.315
	0.61	.239	.228	.236	.230	.234	.281	.312	.301	.309
	0.51	.166	.206	.216	.227	.244	.261	.296	.341	.315
	0.41	.122	.159	.160	.171	.191	.209	.247	.299	.320
	0.31	.090	.117	.120	.131	.163	.186	.222	.276	.305
Main bluntness	0.26	.068	.100	.107	.123	.146	.170	.210	.255	.305
	0.22	.057	.082	.091	.104	.132	.153	.191	.232	.309
	0.18	.033	.052	.063	.075	.106	.136	.176	.234	.322
	0.16	.025	.046	.056	.068	.097	.096	.147	.210	.336
	0.14	.016	.033	.046	.058	.082	.073	.125	.186	.319
	0.12	.009	.028	.041	.055	.082	.034	.096	.165	.295
	0.10	.005	.020	.035	.044	.073	-1.016	.085	.163	.285
	0.08	.003	.015	.032	.043	.069	-1.088	.076	.152	.274
	0.07	.002	.012	.030	.041	.064	.063	.061	.148	.264
	0.06	.001	.010	.028	.039	.061	.057	.053	.144	.254
	0.05	.001	.008	.026	.037	.059	.051	.047	.140	.244
	0.04	.001	.007	.024	.035	.057	.049	.045	.136	.234
	0.03	.001	.006	.022	.033	.055	.047	.043	.132	.224
	0.02	.001	.005	.020	.031	.053	.045	.041	.128	.214
	0.01	.001	.004	.018	.029	.051	.043	.039	.124	.204
	0.00	.001	.003	.016	.027	.049	.041	.037	.120	.194

TABLE 15.- PRESSURE COEFFICIENTS FOR CONFIGURATION 153 - Continued

(c) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -60^\circ$

	x/l	C_p for -									
		$M = 0.40$	$M = 0.50$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$
Nose	.71	.221	.244	.255	.269	.280	.292	.310	.340	.358	.312
	.51	.188	.210	.228	.236	.246	.264	.278	.309	.358	.309
	.43	.166	.183	.197	.208	.220	.237	.251	.284	.335	.309
	.31	.111	.133	.144	.151	.164	.184	.206	.237	.293	.315
	.21	.079	.099	.113	.119	.134	.157	.176	.216	.269	.320
Main sluge	.526	-.087	-.080	-.079	-.077	-.081	-.078	-.091	-.100	-.110	-.132
	.532	.035	.044	.055	.066	.078	.104	.130	.166	.228	.285
	.539	.025	.039	.052	.063	.079	.106	.139	.181	.240	.322
	.551	-.020	-.001	.016	.027	.045	.078	.109	.159	.219	.328
	.552	-.076	-.075	-.053	-.036	-.012	.025	.066	.125	.186	.319
	.562	.290	.298	.268	.224	.170	-.104	-.038	.030	.105	.295
	.568	.864	-1.002	-1.269	-1.492	-1.260	-1.102	-.949	-.821	-.695	-.575
	.577	.222	.229	.272	.353	.474	.911	.905	.792	.674	.565
	.590	-.144	-.138	-.144	-.148	-.166	-.283	-.763	-.671	-.567	-.299
	.597	-.099	-.092	-.098	-.090	-.070	-.075	-.385	-.571	-.478	-.248
	.607	-.087	-.069	-.071	-.065	-.054	-.014	-.071	-.479	-.395	-.204
	.617	-.076	-.058	-.057	-.052	-.050	-.018	.018	-.402	-.331	-.171
	.627	-.065	-.046	-.048	-.044	-.043	-.022	.031	-.328	-.282	-.147
	.637	-.053	-.035	-.034	-.036	-.035	-.022	.022	-.142	-.230	-.117
	.657	-.032	-.020	-.022	-.023	-.023	-.015	.006	.039	-.163	-.073
	.677	-.016	.002	.000	-.001	.002	.005	.010	.044	-.062	-.015
	.697	-.024	-.002	-.010	-.011	-.011	-.007	-.006	.051	-.062	-.050
	.737	-.016	.004	-.005	.006	-.007	.004	-.008	.022	-.071	-.037
	.777	-.012	.000	.000	-.002	-.003	.000	-.005	.011	-.053	-.014
	.785	-.012	.002	.000	-.002	-.001	.002	-.003	.010	-.048	-.008
	.817	-.009	.003	.002	.001	.000	.004	-.003	.005	-.041	-.017
	.857	-.014	-.001	-.003	-.003	-.005	-.001	-.008	.005	-.011	-.011
	.877	-.014	-.001	-.003	-.003	-.006	-.001	-.009	.006	.011	.000
	.897	-.015	-.002	-.004	-.004	-.006	-.002	-.010	.008	.034	.003
	.917	-.017	-.005	-.006	-.007	-.008	-.005	-.012	.011	.036	.003
	.957	-.027	-.014	-.016	-.017	-.019	-.015	-.022	.021	.028	-.013
	.997	-.081	-.071	-.076	-.076	-.079	-.077	-.090	-.099	-.080	-.037

TABLE 15.- PRESSURE COEFFICIENTS FOR CONFIGURATION 153 - Concluded

(a) $M = 0.40$ to 1.20 ; $\alpha = 0^\circ$; $\phi = -90^\circ$

x/l	C_p for -										
	$M = 0.40$	$M = 0.60$	$M = 0.70$	$M = 0.75$	$M = 0.80$	$M = 0.85$	$M = 0.90$	$M = 0.95$	$M = 1.00$	$M = 1.20$	
Nose	.461 .471 .491 .511 .526 .532	.253 -.388 .166 .111 .057 .024	.288 .327 .183 .133 .077 .033	.299 .495 .197 .144 .082 .033	.305 .572 .208 .151 .099 .046	.317 .631 .216 .164 .111 .053	.337 .689 .237 .184 .136 .094	.353 .752 .295 .205 .157 .120	.360 .806 .284 .237 .197 .160	.433 .863 .335 .290 .255 .216	.312 1.022 .309 .315 .317 .257
Upper stage	.552	-.076	-.075	-.053	-.036	-.008	.028	.069	.125	.185	.322
Transition	.568	-.819 -.144 -.087 -.065 -.032 -.024 -.016 -.012 -.012 -.009 -.012 -.015	-1.013 -.138 -.069 -.046 -.020 -.010 -.004 -.000 -.000 -.004 -.001 -.003	-1.237 -.139 -.071 -.048 -.022 -.012 -.005 -.002 -.000 -.003 -.002 -.005	-1.467 -.136 -.065 -.044 -.024 -.014 -.006 -.005 -.002 -.002 -.003 -.005	-1.306 -.131 -.058 -.043 -.025 -.014 -.007 -.003 -.002 -.002 -.004 -.007	-1.134 -.327 -.007 -.022 -.018 -.011 -.004 -.002 -.000 -.006 -.000 -.003	-.979 -.767 -.065 .035 .006 -.008 -.007 -.005 -.005 -.001 -.008 -.011	-.847 -.677 -.479 -.322 -.041 .049 .022 .010 .008 .007 -.004 -.009	-.726 -.570 -.398 -.273 -.164 -.096 -.070 -.053 -.050 -.039 -.041 -.034	-.381 -.299 -.209 -.147 -.072 -.045 -.041 -.018 -.012 -.011 -.006 -.003
Main stage	.777 .765 .817 .857 .897										

TABLE 16.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 121

x/l	C _n for											
	α = 3°				α = 6°				α = 10°			
	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20
Nose	.0875	.0808	.0774	.0781	.1647	.1656	.1604	.1694	.2761	.2814	.2719	.2785
	.0920	.0824	.0795	.0874	.1647	.1690	.1630	.1641	.2742	.2825	.2731	.2742
	.0911	.0817	.0793	.0847	.1685	.1694	.1668	.1606	.2728	.2815	.2766	.2747
	.0830	.0771	.0728	.0820	.1680	.1642	.1564	.1531	.2680	.2675	.2606	.2609
	.0835	.0727	.0636	.0637	.1608	.1519	.1411	.1424	.2549	.2533	.2367	.2381
	.0550	.0496	.0407	.0417	.1132	.0997	.0884	.0977	.1830	.1476	.1476	.1856
	.0980	.0452	.0205	.0312	.1485	.0867	.0641	.0606	.2151	.0905	.1071	.1010
	.0142	.0269	.0461	.0303	.0446	.0407	.0990	.0676	.0871	.1293	.1632	.1152
	.0082	.0639	.0729	.0488	.0282	.1580	.1590	.0983	.0516	.2280	.2614	.1714
	.0028	.0088	.0778	.0520	.0146	.0342	.1686	.1062	.0354	.0707	.2868	.1880
Upper stage	-.0007	-.0054	.0597	.0430	.0074	-.0067	.1308	.0918	.0296	.0166	.1872	.1614
	.0017	-.0013	.0149	.0292	.0088	-.0026	.0241	.0619	.0271	.0108	-.0131	.1109
	.0017	.0052	-.1234	.0142	.0156	.0119	-.1775	.0315	.0344	.0325	-.1540	.0540
	.0261	.0413	.0343	.0270	.0585	.0830	.0910	.0699	.1027	.1248	.1554	.1260
	.0387	.0197	.0176	.0062	.0611	.0578	.0427	.0207	.0836	.1085	.0689	.0486
	.0314	.0218	.0204	.0167	.0575	.0557	.0415	.0335	.0882	.1091	.0723	.0594
	.0348	.0223	.0238	.0309	.0559	.0565	.0526	.0510	.0931	.1180	.0941	.0829
	.0365	.0240	.0276	.0269	.0572	.0577	.0591	.0660	.0914	.1198	.1087	.0982
	.0295	.0232	.0302	.0327	.0572	.0581	.0729	.0734	.0806	.1131	.1236	.1109
	.0185	.0043	.0415	.0419	.0326	.0282	.0687	.0792	.0503	.0734	.1328	.1209
Transition stage	.0091	-.0184	.0244	.0335	.0156	-.0252	.0601	.0519	.0282	-.0067	.0946	.0895
	.0221	.0027	.0156	.0230	.0211	.0034	.0476	.0393	.0236	.0209	.0987	.0930
	.0174	.0012	.0188	.0212	.0185	.0046	.0432	.0385	.0210	.0184	.0841	.0855
	.0153	.0012	.0079	.0139	.0195	-.0001	.0205	.0271	.0127	.0133	.0397	.0619
	.0160	.0012	-.0033	.0086	.0132	.0024	-.0035	.0244	.0124	.0117	.0086	.0527
	.0159	-.0014	.0129	.0059	.0135	.0029	-.0227	.0103	.0145	.0107	-.0265	.0341
	.0184	.0012	-.0176	.0018	.0159	-.0034	-.0350	.0012	.0123	.0115	-.0448	.0191
	.0152	.0027	.0117	.0019	.0166	-.0003	.0304	.0032	.0121	.0105	-.0417	.0078
	.0087	-.0017	-.0107	-.0129	.0089	.0001	-.0311	.0004	.0174	.0145	-.0467	.0053
	.0121	.0000	-.0057	-.0002	.0112	.0047	-.0486	.0068	.0210	.0208	-.0392	.0100
Main stage	.0114	-.0002	-.0011	.0015	.0111	.0049	-.0554	-.0066	.0210	.0228	-.0371	.0122
	.0091	-.0006	-.0033	.0042	.0068	-.0035	.0107	.0039	.0137	.0161	.0165	.0032
	.0099	.0014	-.0043	-.0004	.0083	.0038	.0109	.0090	.0149	.0192	.0235	.0256
	.0080	.0005	-.0085	.0022	.0054	-.0014	.0035	.0026	.0077	.0063	.0043	.0267
	.0090	.0002	.0031	.0114	.0101	.0063	.0139	.0111	.0122	.0164	.0234	.0250
	.0074	-.0020	-.0021	.0020	.0080	.0036	.0098	.0203	.0104	.0136	.0180	.0208
	.0080	-.0015	-.0029	-.0006	.0086	.0036	.0099	-.0004	.0114	.0147	.0201	.0272
	.0075	-.0010	-.0053	.0009	.0081	.0044	.0072	.0028	.0107	.0143	.0182	.0070

TABLE 17.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 221

x/l		C_n for -											
		$\alpha = 30^\circ$				$\alpha = 6^\circ$				$\alpha = 10^\circ$			
		$M = 0.60$		$M = 1.00$		$M = 0.60$		$M = 0.80$		$M = 0.60$		$M = 1.00$	
		$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$
.367	Nose	.1056	.1062	.1016	.1027	.2089	.2098	.1988	.1943	.3438	.3443	.3297	.3274
.377		.1006	.1031	.2972	.0937	.2043	.2011	.1900	.1838	.3341	.3232	.3135	.3073
.387		.0998	.0936	.0896	.0813	.1879	.1804	.1731	.1629	.3270	.3113	.2985	.2904
.399		-.0180	-.2534	.0360	.0228	-.0294	-.4089	.0578	.0473	-.0134	-.5860	.0878	.0764
.404		.1049	-.0721	.0502	.0339	.2004	-.1312	.1024	.0700	.3004	-.0763	.1747	.1288
.409		.0407	.0336	.0931	.0644	.0952	.1033	.1855	.1296	.1807	.2049	.3140	.2268
.419		.0086	.1882	.1120	.0762	.0195	.2700	.2258	.1601	.0533	.3139	.3742	.2757
.424		.0035	.0861	.0968	.0755	.0147	.1157	.1949	.1498	.0325	.1443	.1405	.2457
.439		.0049	.0247	.0481	.0518	.0146	.0418	.0568	.1042	.0352	.0608	.0259	.1766
.449		.0096	.0268	-.1300	.0245	.0205	.0371	-.1562	.0538	.0457	.0545	-.0528	.0893
.454		.0339	.0722	.0403	.0233	.0640	.1098	.0861	.0611	.1113	.1376	.1860	.1331
.482		.0302	.0318	.0105	-.0014	.0567	.0573	.0396	.0061	.0994	.0861	.0687	.0408
.492		.0288	.0293	.0105	.0089	.0539	.0555	.0383	.0168	.0996	.0877	.0572	.0439
.512		.0262	.0343	.0213	.0278	.0529	.0592	.0541	.0388	.1053	.1075	.0830	.0695
.532		.0257	.0363	.0233	.0266	.0587	.0596	.0640	.0545	.1025	.1018	.1034	.0881
.552		.0233	.0338	.0317	.0306	.0511	.0583	.0756	.0659	.0944	.0876	.1231	.1039
.562		.0133	.0106	.0462	.0421	.0339	.0256	.0882	.0765	.0851	.0495	.1373	.1217
.569		-.0001	-.0198	.0268	.0298	-.0014	-.0325	.0637	.0462	.0228	-.0241	.0899	.0819
.577		.0061	.0060	.0126	.0207	.0148	.0021	.0560	.0347	.0308	.0076	.0976	.0860
.587		.0075	.0083	.0177	.0259	.0084	-.0001	.0543	.0314	.0308	.0060	.0861	.0821
.597		.0013	.0259	.0049	.0136	.0073	.0016	.0347	.0239	.0185	.0083	.0485	.0643
.607		.0097	.0084	-.0058	.0107	.0073	.0032	.0121	.0196	.0208	.0066	.0141	.0505
.617		.0038	.0074	-.0159	.0066	.0062	.0006	-.0068	.0062	.0192	.0001	-.0134	.0316
.627		-.0001	.0086	.0225	.0021	.0026	.0015	-.0180	-.0016	.0206	.0031	-.0286	.0176
.637		.0072	.0058	-.0168	.0015	.0070	.0047	-.0102	.0005	.0039	.0039	-.0189	.0009
.657		-.0017	.0072	.0135	-.0118	.0071	.0108	.0071	.0005	.0189	.0056	-.0219	.0042
.677		.0019	.0079	-.0182	-.0011	.0082	.0136	.0042	.0080	.0219	.0113	.0101	.0107
.697		-.0001	.0083	-.0468	-.0004	.0068	.0134	.0022	-.0058	.0234	.0134	-.0113	.0121
.737		.0021	.0059	-.0109	-.0003	.0063	.0146	.0039	.0039	.0039	.0073	.0223	-.0002
.777		.0028	.0096	.0061	-.0040	.0082	.0111	.0142	.0091	.0194	.0106	.0267	.0219
.785		.0005	.0638	.0019	.0018	.0056	.0066	.0096	.0012	.0130	.0006	.0119	.0261
.817		.0032	.0088	.0133	.0115	.0068	.0115	.0085	.0085	.0136	.0113	.0254	.0244
.857		.0019	.0067	.0062	.0014	.0061	.0087	.0081	.0188	.0127	.0083	.0162	.0204
.877		.0025	.0069	.0056	-.0013	.0054	.0088	.0165	-.0011	.0124	.0093	.0183	.0271
.897		.0024	.0068	.0035	.0004	.0062	.0092	.0114	.0006	.0121	.0092	.0164	.0083

TABLE 18.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 321

x/l	C_n for -											
	$\alpha = 30^\circ$			$\alpha = 6^\circ$			$\alpha = 10^\circ$			$\alpha = 1.20$		
	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 0.60$	$M = 0.80$	$M = 1.00$
Nose	.1152 .1107 .1030 -.1641	.1100 .1053 .0955 -.1405	.1068 .0993 .0846 .0167	.1015 .0932 .0846 .0167	.2282 .2132 .1902 -.3209	.2278 .2157 .1919 -.3872	.2167 .2038 .1850 .0613	.2103 .1952 .1746 .0549	.3835 .3668 .3501 -.4266	.3783 .3608 .3298 -.5560	.3581 .3409 .3093 .1062	.3469 .3277 .2894 .0929
Upper stage	.0442 .1974 .0572 .0109 .0084 .0190 .0554	.0814 -.0643 .0389 .0950 .0913 .0657 .0847	.0627 .1083 .1244 .1175 .0653 -.1418 .0579	.0471 .0775 .0981 .0950 .0666 .0372 .0363	.1029 .3388 .0891 .0236 .0137 .0313 .0910	.2283 -.1256 .2027 .2475 .2546 .1713 -.1126 .1588	.1243 .2012 .2475 .2308 .0303 -.1457 .1185	.0963 .1519 .1955 .1850 .1324 .0724 .0787	.2659 .4482 .1613 .0724 .0417 .0541 .1255	.2869 .0167 .3476 .3024 .1856 .1327 .2069	.2040 .3038 .2711 .2034 .1219 .0186 .2368	.1672 .2596 .3242 .3025 .2136 .1093 .1748
Transition Plate	.0301 .0251 .0319 .0291 .0232 .0034	.0207 .0168 .0238 .0244 .0180 -.0119	.0120 .0114 .0187 .0270 .0373 .0516	-.0041 .0034 .0227 .0240 .0320 .0452	.0566 .0472 .0469 .0519 .0444 .0149	.0603 .0531 .0608 .0699 .0616 .0221	.0240 .0229 .0421 .0558 .0735 .0945	.0017 .0113 .0356 .0525 .0675 .0814	.0985 .1008 .1104 .1026 .0908 .0600	.0936 .0904 .0994 .1114 .0981 .0550	.0706 .0490 .0716 .1005 .1240 .1411	.0416 .0350 .0524 .0799 .0968 .1219
Main stage	-.0064 .0073 .0096 .0096 .0095 .0096 .0049 .0073 .0004 .0032 .0023 .0014 .0020 .0029 .0019 .0024 .0022	-.0372 -.0011 .0039 .0040 .0040 .0046 .0039 .0040 -.0002 .0022 .0012 .0011 .0028 -.0015 -.0008 -.0004 .0005	.0341 .0124 .0144 .0030 -.0116 .0247 .0247 .0181 .0270 .0576 .0923 .0999 .0005 -.0050 .0164 .0091 .0054 .0009	.0287 .0210 .0114 .0123 .0076 .0060 .0039 .0017 -.0086 .0018 .0011 .0031 -.0008 .0011 .0114 .0019 .0000 .0008	-.0109 .0041 .0039 .0039 .0017 -.0022 .0003 .0009 .0014 .0006 .0015 .0006 -.0010 -.0030 .0030 .0004 .0012 .0021	-.0463 .0011 .0093 .0071 .0102 .0093 .0075 .0070 .0080 .0136 .0132 .0085 .0106 .0046 .0103 .0085 .0087 .0087	.0564 .0393 .0368 .0157 -.0061 -.0237 -.0322 -.0221 -.0149 -.0212 -.0526 .0070 .0108 .0056 .0165 .0092 .0085 .0085 .0050	.0496 .0348 .0316 .0223 .0201 .0077 -.0014 -.0005 -.0011 .0068 .0057 .0039 .0092 .0020 .0118 .0200 .0198 .0169 .0190 .0013	.0209 .0320 .0297 .0249 .0234 .0187 .0172 .0206 .0152 .0207 .0214 .0152 .0249 .0214 .0166 .0110 .0153 .0127 .0142 .0133	.0904 .0962 .0750 .0276 -.0035 -.0285 -.0403 -.0286 -.0294 -.0331 -.0461 -.0241 -.0285 -.0200 .0118 .0200 .0198 .0169 .0190 .0179	.0877 .0898 .0835 .0604 .0471 .0308 .0153 .0053 .0049 .0117 .0155 -.0007 -.0265 -.0268 -.0304 .0215 -.0281 .0076	

TABLE 19.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 122

x/l	C_n for -											
	$\alpha = 30^\circ$				$\alpha = 6^\circ$				$\alpha = 10^\circ$			
	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$	$M = 0.60$	$M = 0.80$	$M = 1.00$	$M = 1.20$
Nose												
	.392	.0782	.0799	.0759	.0838	.1543	.1637	.1569	.1617	.2720	.2755	.2702
	.402	.0810	.0820	.0782	.0784	.1603	.1665	.1591	.1628	.2712	.2775	.2718
	.412	.0810	.0804	.0783	.0742	.1575	.1688	.1574	.1617	.2661	.2782	.2722
	.432	.0782	.0756	.0757	.0726	.1525	.1658	.1511	.1492	.2590	.2664	.2612
	.442	.0763	.0738	.0691	.0675	.1463	.1488	.1354	.1434	.2515	.2498	.2373
	.447	.0563	.0491	.0423	.0462	.0957	.0988	.0866	.0937	.1776	.1603	.1157
	.453	.0884	.0055	.0232	.0345	.1337	.0295	.0351	.0664	.1999	.0818	.1104
	.459	.0171	.0334	.0427	.0248	.0426	.0803	.0872	.0567	.0960	.1950	.1478
	.463	.0046	.0483	.0627	.0382	.0297	.1133	.1368	.0843	.0591	.2630	.2010
	.473	.0019	.0036	.0798	.0444	.0184	.0155	.0939	.1022	.0367	.0492	.0489
	.483	.0003	.0030	.0505	.0420	.0169	.0016	.1101	.0873	.0340	.0157	.0479
	.493	.0019	.0011	.1266	.0327	.0168	.0082	.1334	.0598	.0330	.0237	.0737
	.503	.0044	.0127	.0736	.0202	.0266	.0291	.1410	.0627	.0536	.0535	.2043
	.513	.0305	.0496	.1253	.0480	.0866	.1022	.2226	.0921	.1422	.1671	.3255
Upper stage												
	.525	.0372	.0476	.0551	.0506	.0744	.0968	.0984	.0962	.1323	.1473	.1606
	.535	.0480	.0515	.0280	.0323	.0852	.1094	.0730	.0790	.1624	.1698	.1412
	.545	.0494	.0565	.0326	.0412	.0873	.1176	.0861	.0840	.1661	.1855	.1518
	.555	.0429	.0612	.0521	.0521	.0910	.1227	.1058	.0946	.1584	.1833	.1668
	.565	.0217	.0579	.0657	.0778	.0484	.1152	.1218	.1340	.1022	.1192	.1795
Transition												
	.564	.0071	.1161	.0306	.0309	.0086	.1289	.0590	.0588	.0547	.1250	.0885
	.577	.0129	.0182	.0268	.0229	.0209	.0323	.0749	.0516	.0355	.0394	.1521
	.587	.0067	.0083	.0404	.0269	.0046	.0184	.0927	.0635	.0331	.0185	.1746
	.597	.0002	.0056	.0346	.0205	.0026	.0102	.0753	.0544	.0209	.0166	.1329
	.607	.0006	.0046	.0209	.0234	.0011	.0101	.0466	.0503	.0242	.0132	.0638
	.617	.0016	.0047	.0023	.0163	.0014	.0060	.0014	.0339	.0169	.0123	.0662
	.627	.0005	.0031	.0193	.0086	.0051	.0069	.0343	.0210	.0130	.0083	.0430
	.637	.0031	.0031	.0219	.0016	.0050	.0076	.0374	.0147	.0120	.0106	.0299
	.647	.0027	.0009	.0162	.0128	.0005	.0052	.0301	.0015	.0119	.0131	.0440
	.657	.0023	.0035	.0068	.0039	.0044	.0094	.0120	.0010	.0175	.0189	.0092
	.677	.0023	.0002	.0025	.0040	.0052	.0096	.0025	.0131	.0190	.0213	.0067
	.687	.0035	.0002	.0036	.0006	.0010	.0057	.0004	.0022	.0122	.0154	.0168
	.707	.0023	.0002	.0043	.0015	.0001	.0076	.0047	.0072	.0146	.0193	.0209
	.717	.0023	.0002	.0015	.0006	.0019	.0034	.0031	.0025	.0086	.0108	.0180
	.735	.0047	.0025	.0017	.0006	.0001	.0091	.0031	.0077	.0086	.0176	.0244
	.745	.0003	.0015	.0088	.0100	.0001	.0091	.0018	.0018	.0127	.0149	.0218
	.757	.0017	.0031	.0020	.0017	.0011	.0065	.0064	.0266	.0108	.0237	.0228
	.777	.0016	.0021	.0033	.0037	.0021	.0073	.0160	.0003	.0108	.0145	.0256
	.797	.0013	.0003	.0036	.0001	.0014	.0076	.0077	.0024	.0094	.0146	.0084
Main stage												
	.564	.0071	.1161	.0306	.0309	.0086	.1289	.0590	.0588	.0547	.1250	.0885
	.577	.0129	.0182	.0268	.0229	.0209	.0323	.0749	.0516	.0355	.0394	.1521
	.587	.0067	.0083	.0404	.0269	.0046	.0184	.0927	.0635	.0331	.0185	.1746
	.597	.0002	.0056	.0346	.0205	.0026	.0102	.0753	.0544	.0209	.0166	.1329
	.607	.0006	.0046	.0209	.0234	.0011	.0101	.0466	.0503	.0242	.0132	.0638
	.617	.0016	.0047	.0023	.0163	.0014	.0060	.0014	.0339	.0169	.0123	.0662
	.627	.0005	.0031	.0193	.0086	.0051	.0069	.0343	.0210	.0130	.0083	.0430
	.637	.0031	.0031	.0219	.0016	.0050	.0076	.0374	.0147	.0120	.0106	.0299
	.647	.0027	.0009	.0162	.0128	.0005	.0052	.0301	.0015	.0119	.0131	.0440
	.657	.0023	.0035	.0068	.0039	.0044	.0094	.0120	.0010	.0175	.0189	.0092
	.677	.0023	.0002	.0025	.0040	.0052	.0096	.0025	.0131	.0190	.0213	.0067
	.687	.0035	.0002	.0036	.0006	.0010	.0057	.0004	.0022	.0122	.0154	.0168
	.707	.0023	.0002	.0043	.0015	.0001	.0076	.0047	.0072	.0146	.0193	.0209
	.717	.0023	.0002	.0015	.0006	.0019	.0034	.0031	.0025	.0086	.0108	.0180
	.735	.0047	.0025	.0017	.0006	.0001	.0091	.0031	.0077	.0086	.0176	.0244
	.745	.0003	.0015	.0088	.0100	.0001	.0091	.0018	.0018	.0127	.0149	.0218
	.757	.0017	.0031	.0020	.0017	.0011	.0065	.0064	.0266	.0108	.0237	.0228
	.777	.0016	.0021	.0033	.0037	.0021	.0073	.0160	.0003	.0108	.0145	.0256
	.797	.0013	.0003	.0036	.0001	.0014	.0076	.0077	.0024	.0094	.0146	.0084

TABLE 20.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 222

x/h		C_z for -											
		$\alpha = 30^\circ$				$\alpha = 60^\circ$				$\alpha = 10^\circ$			
		M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20
Main stage	.421	.1017	.1069	.0979		.2092	.2106	.1944	.9394	.3449	.3415	.3333	.3301
	.431	.0957	.1026	.0981		.1996	.2030	.1869	.8761	.3387	.3238	.3174	.3126
	.441	.0922	.0920	.0885		.1929	.1861	.1710	.7637	.3248	.3012	.3000	.2928
	.453	.0333	.3482	.0106		.0201	.5992	.0247	.4556	.0755	.7197	.0551	.0258
	.458	.1068	.0770	.0578		.2038	.1853	.1124	.4238	.3147	.2053	.0278	.1492
Transition stage	.463	.0471	.0034	.0894		.1228	.0200	.1639	.2882	.2400	.1168	.0035	.2286
	.473	.0051	.1472	.1102		.0266	.2957	.0285	.1071	.0787	.3369	.0699	.2814
	.483	.0011	.1115	.1066		.0178	.2035	.0851	.0369	.0426	.1898	.0877	.2512
	.493	.0013	.0465	.1938		.0153	.0967	.0552	.0326	.0495	.1043	.0373	.1448
	.503	.0087	.0445	.1250		.0280	.0874	.2506	.1582	.0724	.1041	.2941	.0507
Flare	.513	.0470	.1130	.1994		.0982	.1936	.3400	.3893	.1727	.2202	.4415	.2006
	.525	.0433	.0636	.0839		.0858	.1151	.1780	.4215	.1404	.1587	.2447	.1563
	.535	.0490	.0584	.0379		.0986	.1079	.1072	.3598	.1623	.1646	.1906	.1300
	.545	.0465	.0615	.0373		.0998	.1154	.0941	.3276	.1670	.1696	.1710	.1302
	.555	.0461	.0627	.0559		.0975	.1202	.1115	.3416	.1551	.1657	.1840	.1500
Nose	.565	.0108	.0150	.0786		.0480	.0576	.1283	.2835	.0923	.1089	.1899	.1939
	.568	.0128	.2607	.0315		.0037	.2748	.0442	.2079	.0378	.2239	.0899	.0971
	.577	.0114	.0167	.0028		.0316	.0231	.0271	.1782	.0576	.0146	.1049	.0932
	.587	.0088	.0183	.0215		.0207	.0250	.0569	.1134	.0390	.0102	.1287	.1167
	.597	.0011	.0132	.0196		.0148	.0185	.0363	.0717	.0330	.0079	.0834	.0995
	.607	.0014	.0132	.0068		.0155	.0185	.0074	.0694	.0290	.0067	.0179	.0338
	.617	.0014	.0115	.0079		.0093	.0158	.0218	.0741	.0264	.0042	.0194	.0359
	.627	.0014	.0100	.0212		.0071	.0159	.0356	.0747	.0187	.0035	.0508	.0346
	.637	.0048	.0084	.0197		.0095	.0158	.0279	.0605	.0178	.0072	.0493	.0266
	.657	.0030	.0097	.0126		.0087	.0149	.0127	.0524	.0300	.0058	.0371	.0041
	.677	.0010	.0110	.0053		.0112	.0178	.0031	.0424	.0268	.0108	.0101	.0027
	.737	.0019	.0099	.0021		.0107	.0189	.0116	.0631	.0299	.0116	.0061	.0023
	.777	.0055	.0074	.0209		.0061	.0139	.0423	.0387	.0224	.0056	.0265	.0083
	.785	.0052	.0093	.0020		.0069	.0162	.0193	.0179	.0227	.0079	.0027	.0248
	.817	.0042	.0061	.0026		.0070	.0113	.0138	.0188	.0200	.0039	.0033	.0262
	.857	.0014	.0099	.0017		.0083	.0177	.0173	.0029	.0214	.0113	.0066	.0264
	.877	.0028	.0090	.0012		.0076	.0159	.0057	.0179	.0188	.0092	.0139	.0242
	.877	.0025	.0090	.0022		.0069	.0160	.0052	.0159	.0188	.0097	.0221	.0288
	.897	.0029	.0092	.0023		.0071	.0155	.0021	.0104	.0194	.0097	.0255	.0104

TABLE 21.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 322

x/l	C_n for -											
	$\alpha = 30^\circ$				$\alpha = 6^\circ$				$\alpha = 10^\circ$			
	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20
Nose												
Upper stage	.426	.1041	.1115	.0977	.2114	.0242	.2146	.2029	.3680	.3727	.3557	.3475
	.436	.1008	.1004	.0935	.1889	.0205	.2154	.1891	.3462	.3507	.3391	.3261
	.446	.0837	.0858	.0785	.1542	.0677	.1820	.1666	.3009	.3143	.3079	.2916
	.453	-.3975	-.4016	.0133	-.6542	.0282	.0435	.0334	-.8456	-.6982	-.1130	.0669
	.458	-.0731	-.2394	.0531	-.0242	.0412	-.0172	.0861	.1127	-.3182	-.3428	.518
	.463	.1981	-.1480	.0955	.3220	.0791	-.0355	.1612	.4568	-.0574	-.1229	.2721
	.473	.1354	.0839	.1014	.2605	.0442	.0090	.2094	.3417	.3561	.2210	.3500
	.483	.0072	.1842	.0957	.0677	.0281	.0281	.1934	.1349	.3340	.2102	.2658
	.493	-.0077	.1634	.0674	.0222	.0118	.0118	.1372	.0754	.2431	.2390	.0914
	.503	.0152	.1283	-.0252	.0463	.2872	-.0777	.1214	.0959	.2112	.3770	-.0070
Transition flare	.513	.0764	.1540	.0575	.1403	.4057	.0274	.0974	.2029	.3169	.5674	.2393
	.525	.0505	.0718	.0390	.0883	.2201	.0974	.0663	.1477	.1813	.3487	.1860
	.535	.0491	.0512	.0189	.0803	.1504	.0663	.0636	.1595	.1609	.2496	.1495
	.545	.0469	.0448	.0271	.0792	.1251	.0616	.0792	.1606	.1531	.2106	.1353
	.555	.0382	.0366	.0415	.0760	.1348	.0792	.0792	.1478	.1456	.2061	.1439
	.565	-.0240	.0707	.0738	-.0153	.1527	.1317	.1317	.0583	.0504	.1960	.1867
	.568	-.0530	.02698	.0291	-.0680	.0278	.0507	.0507	-.0101	.3096	.0490	.0769
	.577	.0103	.0116	.0195	.0101	-.0189	.0385	.0385	.0465	.0861	.0412	.0852
	.587	.0093	.0042	.0225	.0090	.0144	.0550	.0550	.0391	.0118	.0664	.1041
	.597	.0031	.0057	.0165	.0075	-.0011	.0474	.0474	.0331	.0134	.0087	.0919
Main stage	.607	.0056	.0057	.0198	.0100	.0233	.0444	.0444	.0314	.0150	.0348	.0762
	.617	.0016	.0040	.0160	.0036	.0364	.0277	.0277	.0313	.0093	-.0538	.0487
	.627	.0064	.0026	.0085	-.0001	.0395	.0162	.0162	.0251	.0115	-.0659	.0271
	.637	.0017	.0073	.0027	.0016	.0229	.0119	.0119	.0274	.0115	-.0351	.0145
	.647	.0046	.0037	.0122	.0059	-.0042	-.0022	-.0022	.0188	.0141	-.0164	.0145
	.657	.0062	.0051	.0050	.0013	.0021	-.0009	-.0009	.0221	.0199	.0060	.0012
	.677	.0061	.0058	.0051	.0012	.0044	-.0007	-.0007	.0269	.0223	.0053	.0001
	.697	.0007	.0037	.0001	.0040	.0167	-.0001	-.0001	.0199	.0143	-.0344	.0093
	.717	.0034	.0044	.0059	.0041	.0176	.0079	.0079	.0199	.0171	.0120	.0198
	.737	.0027	.0012	.0029	.0056	.0047	.0013	.0013	.0165	.0107	.0121	.0245
Nose	.757	-.0002	.0042	.0053	.0001	.0139	.0100	.0100	.0185	.0161	.0290	.0306
	.817	-.0003	.0019	.0030	.0012	.0102	.0100	.0209	.0163	.0140	.0238	.0246
	.877	-.0005	.0028	.0031	.0014	.0121	.0121	.0005	.0174	.0151	.0255	.0296
	.897	-.0004	.0032	.0031	.0013	.0125	.0032	.0032	.0176	.0150	.0259	.0146

TABLE 22.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 123

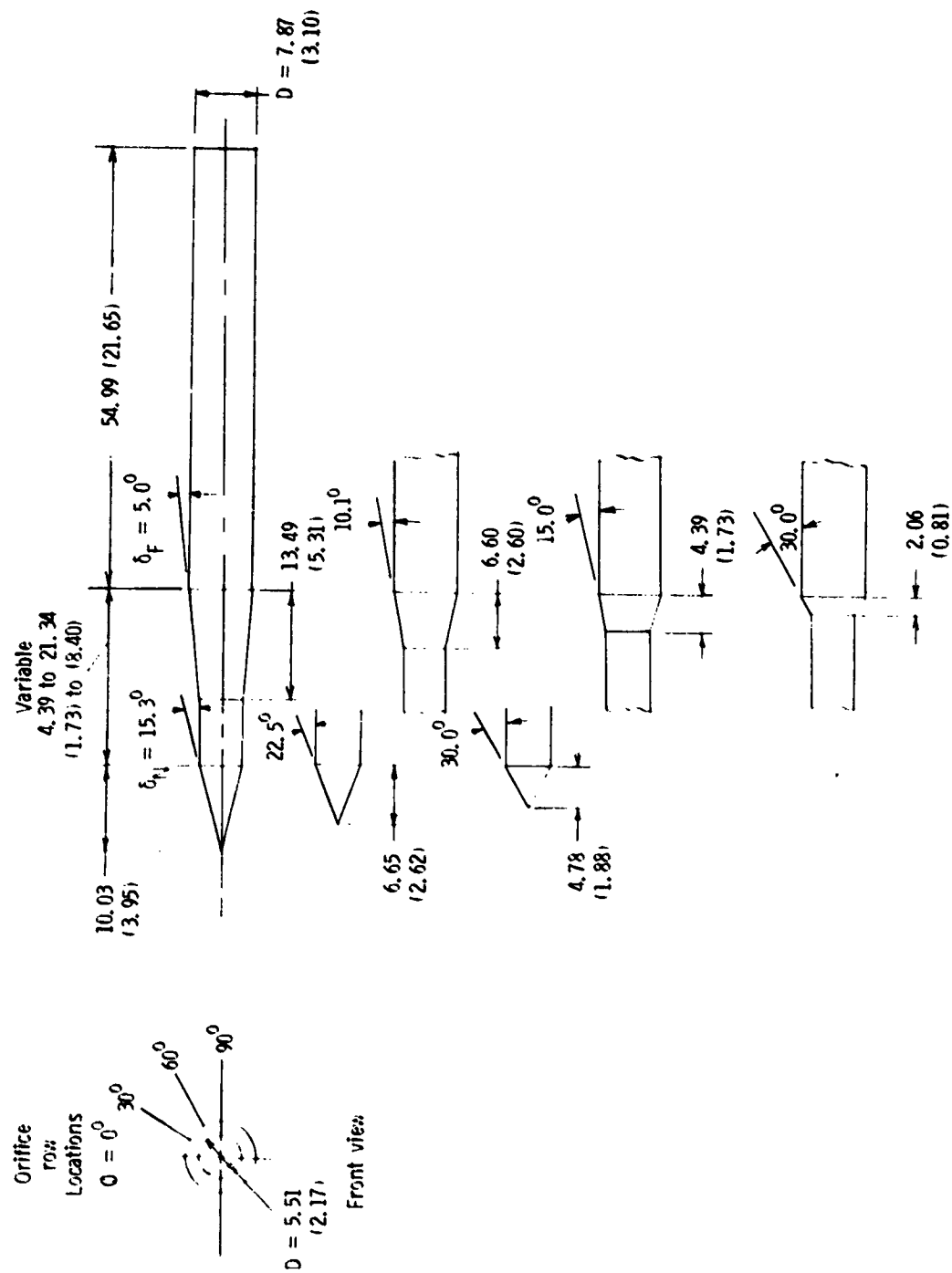
x/t	C _n for -													
	α = 30°				α = 60°				α = 10°					
	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20		
Noise														
	.410	.420	.430	.440	.450	.460	.471	.476	.481	.491	.501	.511	.521	.531
	.0756	.0772	.0789	.0803	.0817	.0831	.0846	.0860	.0875	.0890	.0905	.0920	.0935	.0950
	.0856	.0879	.0894	.0909	.0924	.0939	.0954	.0969	.0984	.0999	.1014	.1029	.1044	.1059
	.0737	.0756	.0776	.0796	.0816	.0836	.0856	.0876	.0896	.0916	.0936	.0956	.0976	.0996
	.0600	.0612	.0625	.0638	.0651	.0664	.0677	.0690	.0703	.0716	.0729	.0742	.0755	.0768
	.0356	.0369	.0382	.0395	.0408	.0421	.0434	.0447	.0460	.0473	.0486	.0499	.0512	.0525
	.0259	.0272	.0285	.0298	.0311	.0324	.0337	.0350	.0363	.0376	.0389	.0402	.0415	.0428
	.0125	.0138	.0151	.0164	.0177	.0190	.0203	.0216	.0229	.0242	.0255	.0268	.0281	.0294
	.0089	.0098	.0107	.0116	.0125	.0134	.0143	.0152	.0161	.0170	.0179	.0188	.0197	.0206
	.0060	.0068	.0076	.0084	.0092	.0100	.0108	.0116	.0124	.0132	.0140	.0148	.0156	.0164
	.0036	.0041	.0046	.0051	.0056	.0061	.0066	.0071	.0076	.0081	.0086	.0091	.0096	.0101
	.0021	.0024	.0027	.0030	.0033	.0036	.0039	.0042	.0045	.0048	.0051	.0054	.0057	.0060
	.0012	.0014	.0016	.0018	.0020	.0022	.0024	.0026	.0028	.0030	.0032	.0034	.0036	.0038
	.0006	.0007	.0008	.0009	.0010	.0011	.0012	.0013	.0014	.0015	.0016	.0017	.0018	.0019
	.0003	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007	.0008	.0008	.0009	.0009	.0010
	.0001	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007	.0008
	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Upper stage														
	.539	.546	.552	.558	.564	.570	.576	.582	.588	.594	.600	.606	.612	.618
Transition														
	.0477	.0500	.0524	.0548	.0572	.0596	.0620	.0644	.0668	.0692	.0716	.0740	.0764	.0788
	.0728	.0741	.0754	.0767	.0780	.0793	.0806	.0819	.0832	.0845	.0858	.0871	.0884	.0897
	.1234	.1257	.1280	.1303	.1326	.1349	.1372	.1395	.1418	.1441	.1464	.1487	.1510	.1533
	.1520	.1543	.1566	.1589	.1612	.1635	.1658	.1681	.1704	.1727	.1750	.1773	.1796	.1819
	.1311	.1324	.1337	.1350	.1363	.1376	.1389	.1402	.1415	.1428	.1441	.1454	.1467	.1480
	.1089	.1102	.1115	.1128	.1141	.1154	.1167	.1180	.1193	.1206	.1219	.1232	.1245	.1258
	.0843	.0856	.0869	.0882	.0895	.0908	.0921	.0934	.0947	.0960	.0973	.0986	.0999	.1012
	.0613	.0626	.0639	.0652	.0665	.0678	.0691	.0704	.0717	.0730	.0743	.0756	.0769	.0782
	.0383	.0396	.0409	.0422	.0435	.0448	.0461	.0474	.0487	.0500	.0513	.0526	.0539	.0552
	.0259	.0272	.0285	.0298	.0311	.0324	.0337	.0350	.0363	.0376	.0389	.0402	.0415	.0428
	.0125	.0138	.0151	.0164	.0177	.0190	.0203	.0216	.0229	.0242	.0255	.0268	.0281	.0294
	.0089	.0098	.0107	.0116	.0125	.0134	.0143	.0152	.0161	.0170	.0179	.0188	.0197	.0206
	.0060	.0068	.0076	.0084	.0092	.0100	.0108	.0116	.0124	.0132	.0140	.0148	.0156	.0164
	.0036	.0041	.0046	.0051	.0056	.0061	.0066	.0071	.0076	.0081	.0086	.0091	.0096	.0101
	.0021	.0024	.0027	.0030	.0033	.0036	.0039	.0042	.0045	.0048	.0051	.0054	.0057	.0060
	.0012	.0014	.0016	.0018	.0020	.0022	.0024	.0026	.0028	.0030	.0032	.0034	.0036	.0038
	.0006	.0007	.0008	.0009	.0010	.0011	.0012	.0013	.0014	.0015	.0016	.0017	.0018	.0019
	.0003	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007	.0008	.0008	.0009	.0009	.0010
	.0001	.0002	.0002	.0003	.0003	.0004	.0004	.0005	.0005	.0006	.0006	.0007	.0007	.0008
	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
Main stage														
	.568	.577	.587	.597	.607	.617	.627	.637	.647	.657	.667	.677	.687	.697
	.0633	.0659	.0677	.0695	.0713	.0731	.0749	.0767	.0785	.0803	.0821	.0839	.0857	.0875
	.1205	.1231	.1257	.1283	.1309	.1335	.1361	.1387	.1413	.1439	.1465	.1491	.1517	.1543
	.0977	.1003	.1029	.1055	.1081	.1107	.1133	.1159	.1185	.1211	.1237	.1263	.1289	.1315
	.0372	.0398	.0424	.0450	.0476	.0502	.0528	.0554	.0580	.0606	.0632	.0658	.0684	.0710
	.0341	.0367	.0393	.0419	.0445	.0471	.0497	.0523	.0549	.0575	.0601	.0627	.0653	.0679
	.0312	.0338	.0364	.0390	.0416	.0442	.0468	.0494	.0520	.0546	.0572	.0598	.0624	.0650
	.0245	.0271	.0297	.0323	.0349	.0375	.0401	.0427	.0453	.0479	.0505	.0531	.0557	.0583
	.0172	.0198	.0224	.0250	.0276	.0302	.0328	.0354	.0380	.0406	.0432	.0458	.0484	.0510
	.0083	.0109	.0135	.0161	.0187	.0213	.0239	.0265	.0291	.0317	.0343	.0369	.0395	.0421
	.0073	.0099	.0125	.0151	.0177	.0203	.0229	.0255	.0281	.0307	.0333	.0359	.0385	.0411
	.0120	.0146	.0172	.0198	.0224	.0250	.0276	.0302	.0328	.0354	.0380	.0406	.0432	.0458
	.0027	.0053	.0079	.0105	.0131	.0157	.0183	.0209	.0235	.0261	.0287	.0313	.0339	.0365
	.0019	.0045	.0071	.0097	.0123	.0149	.0175	.0201	.0227	.0253	.0279	.0305	.0331	.0357
	.0011	.0037	.0063	.0089	.0115	.0141	.0167	.0193	.0219	.0245	.0271	.0297	.0323	.0349
	.0007	.0023	.0039	.0055	.0071	.0087	.0103	.0119	.0135	.0151	.0167	.0183	.0199	.0215
	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052	.0058	.0064	.0070	.0076	.0082
	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050	.0056	.0062	.0068	.0074	.0080
	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049	.0055	.0061	.0067	.0073	.0079
	.0000	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0060	.0066	.0072	.0078
	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047	.0053	.0059	.0065	.0071	.0077
	.0000	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052	.0058	.0064	.0070	.0076
	.0000	.0003	.0009	.0015	.0021	.0027	.0033	.0039	.0045	.0051	.0057	.0063	.0069	.0075
	.0000	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050	.0056	.0062	.0068	.0074
	.0000	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049	.0055	.0061	.0067	.0073
	.0000	.0001	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0060	.0066	.0072
	.0000	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047	.0053	.0059	.0065	.0071
	.0000	.0000	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052	.0058	.0064	.0070
	.0000	.0000	.0003	.0009	.0015	.0021	.0027	.0033	.0039	.0045	.0051	.0057	.0063	.0069
	.0000	.0000	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050	.0056	.0062	.0068
	.0000	.0000	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049	.0055	.0061	.0067
	.0000	.0000	.0000	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0060	.0066
	.0000	.0000	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047	.0053	.0059	.0065
	.0000	.0000	.0000	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052	.0058	.0064
	.0000	.0000	.0000	.0003	.0009	.0015	.0021	.0027	.0033	.0039	.0045	.0051	.0057	.0063
	.0000	.0000	.0000	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050	.0056	.0062
	.0000	.0000	.0000	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049	.0055	.0061
	.0000	.0000	.0000	.0000	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054	.0060
	.0000	.0000	.0000	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047	.0053	.0059
	.0000	.0000	.0000	.0000	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052	.0058
	.0000	.0000	.0000	.0000	.0003	.0009	.0015	.0021	.0027	.0033	.0039	.0045	.0051	.0057
	.0000	.0000	.0000	.0000	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050	.0056
	.0000	.0000	.0000	.0000	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049	.0055
	.0000	.0000	.0000	.0000	.0000	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048	.0054
	.0000	.0000	.0000	.0000	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047	.0053
	.0000	.0000	.0000	.0000	.0000	.0004	.0010	.0016	.0022	.0028	.0034	.0040	.0046	.0052
	.0000	.0000	.0000	.0000	.0000	.0003	.0009	.0015	.0021	.0027	.0033	.0039	.0045	.0051
	.0000	.0000	.0000	.0000	.0000	.0002	.0008	.0014	.0020	.0026	.0032	.0038	.0044	.0050
	.0000	.0000	.0000	.0000	.0000	.0001	.0007	.0013	.0019	.0025	.0031	.0037	.0043	.0049
	.0000	.0000	.0000	.0000	.0000	.0000	.0006	.0012	.0018	.0024	.0030	.0036	.0042	.0048
	.0000	.0000	.0000	.0000	.0000	.0000	.0005	.0011	.0017	.0023	.0029	.0035	.0041	.0047
	.0000	.0000	.0											

TABLE 24.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 323

[illegible]

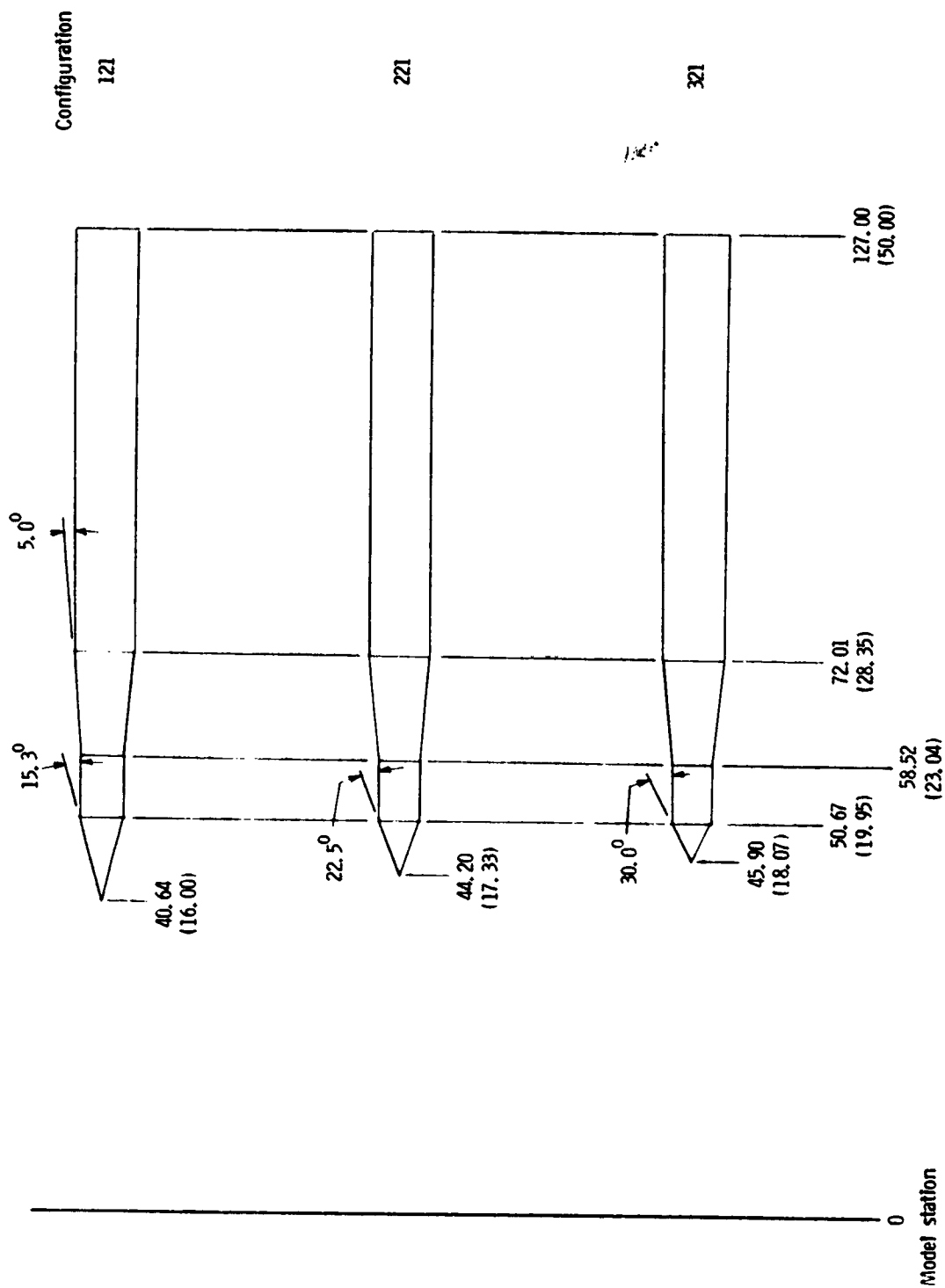
TABLE 25.- SECTION NORMAL-FORCE COEFFICIENTS FOR CONFIGURATION 124

x/l	C_n for -											
	$\alpha = 30^\circ$				$\alpha = 60^\circ$				$\alpha = 10^\circ$			
	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20	M = 0.60	M = 0.80	M = 1.00	M = 1.20
Nose												
	.0760	.0805	.0825	.0715	.1666	.1673	.1584	.1610	.2780	.2818	.2666	.2672
	.0722	.0805	.0832	.0762	.1667	.1713	.1610	.1570	.2722	.2823	.2666	.2754
	.0725	.0791	.0821	.0733	.1628	.1655	.1604	.1612	.2677	.2774	.2639	.2734
	.0681	.0775	.0810	.0715	.1595	.1586	.1521	.1522	.2618	.2652	.2539	.2580
	.0388	.0719	.0750	.0676	.1537	.1529	.1419	.1396	.2529	.2523	.2313	.2397
	.0534	.0429	.0468	.0435	.1008	.0966	.0780	.0924	.1722	.1559	.1368	.1574
		.0098	.0164	.0196	.1747	.0196	.0191	.0397	.2484	.0578	.0153	.0636
	.0182	.0078	.0422	.0275	.0572	.0410	.0394	.0572	.1023	.0958	.0434	.0815
	.0059	.0500	.0365	.0442	.0384	.0906	.0359	.0176	.0634	.1578	.0286	.0446
	.0015	.0247	.0701	.0219	.0248	.0347	.0778	.1406	.0368	.0533	.1664	.0968
	.0031	.0006	.1303	.0474	.0175	.0040	.1926	.1816	.0303	.0165	.2538	.1246
	.0032	.0067	.1827	.1365	.0168	.0183	.2148	.2237	.0289	.0315	.2538	.2428
	.0140	.0465	.2534	.1356	.0399	.0831	.2799	.2430	.0766	.1183	.3297	.3847
	.0785	.1029	.2988	.1567	.1577	.1844	.3579	.2590	.2397	.2651	.4570	.4288
	.0453	.0683	.2700	.1337	.1041	.1389	.2532	.2974	.1577	.1838	.2770	.4529
	.0488	.0825	.2302	.2774	.1010	.1473	.2453	.3896	.1528	.2096	.2847	.4618
	.2202	.1489	.0282	.0257	.3574	.3366	.0111	.0320	.4904	.5936	.0436	.0145
	.0867	.0455	.1758	.0253	.1695	.0744	.0621	.0056	.2469	.0748	.0734	.0632
	.1101	.0271	.0851	.0086	.2359	.0995	.0537	.0728	.3090	.2944	.2082	.1961
	.0250	.0599	.0133	.0194	.0749	.1345	.0813	.0769	.1123	.2295	.2149	.1708
	.0041	.0466	.0151	.0213	.0193	.0900	.0583	.0013	.0321	.1254	.1217	.1652
	.0103	.0248	.0192	.0194	.0046	.0449	.0132	.0507	.0100	.0483	.0417	.1161
	.0078	.0141	.0210	.0156	.0032	.0225	.0097	.0301	.0041	.0153	.0075	.0614
	.0077	.0075	.0265	.0141	.0081	.0143	.0155	.0155	.0051	.0103	.0311	.0350
	.0090	.0330	.0134	.0071	.0127	.0068	.0165	.0022	.0113	.0075	.0366	.0004
	.0061	.0045	.0072	.0040	.0174	.0113	.0118	.0027	.0232	.0159	.0233	.0076
	.0068	.0045	.0033	.0017	.0153	.0126	.0126	.0127	.0219	.0208	.0124	.0066
	.0096	.0024	.0012	.0038	.0148	.0085	.0156	.0019	.0123	.0148	.0031	.0107
	.0124	.0017	.0046	.0036	.0138	.0113	.0224	.0065	.0167	.0207	.0151	.0187
	.0067	.0030	.0032	.0028	.0084	.0083	.0392	.0032	.0122	.0152	.0122	.0258
	.0062	.0052	.0059	.0090	.0152	.0112	.0381	.0073	.0175	.0192	.0228	.0327
	.0067	.0036	.0010	.0015	.0132	.0087	.0801	.0181	.0164	.0168	.0139	.0256
	.0067	.0038	.0010	.0015	.0140	.0100	.0368	.0016	.0168	.0168	.0139	.0311
	.0070	.0036	.0021	.0003	.0142	.0105	.0004	.0007	.0172	.0179	.0427	.0124



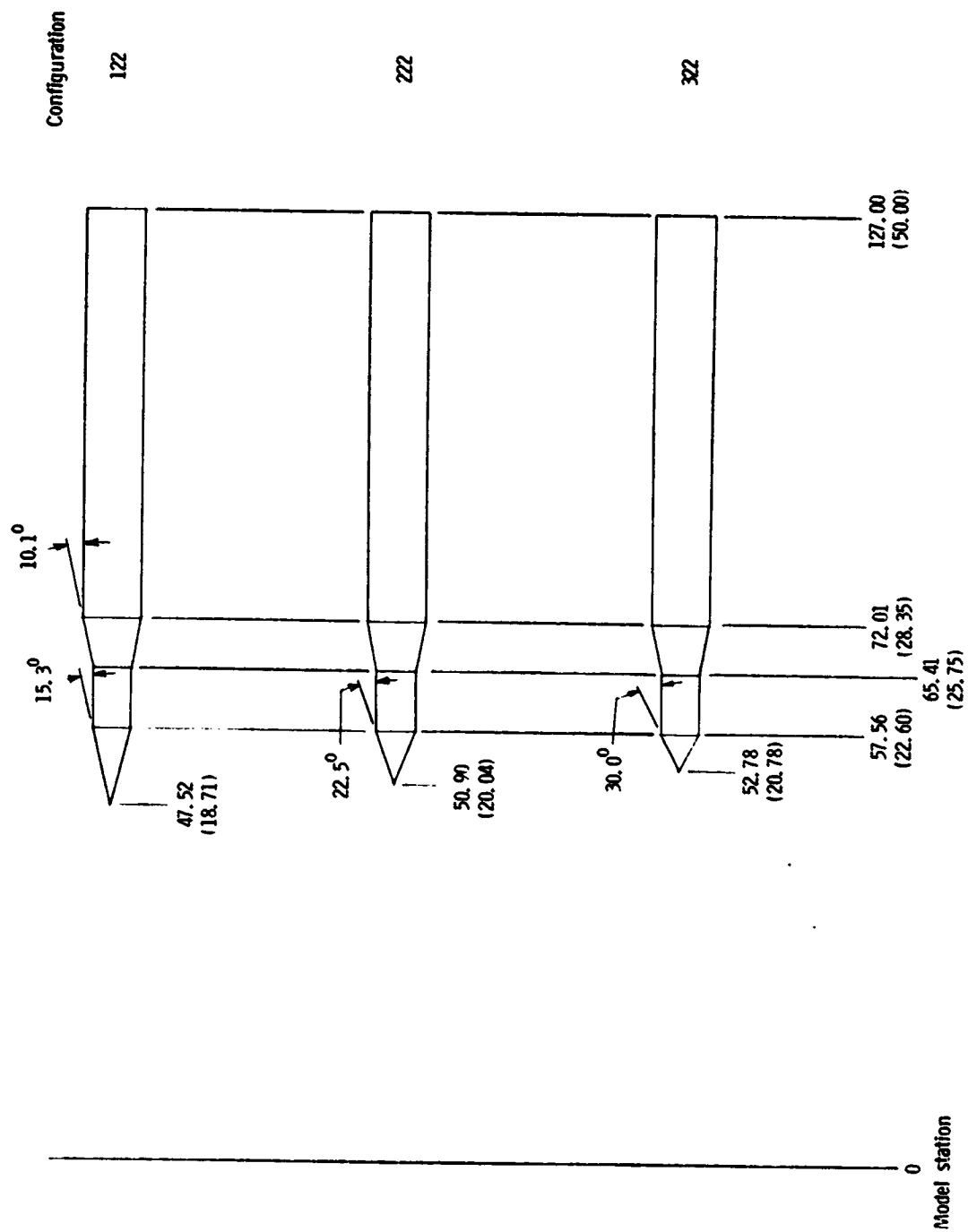
(a) Configuration geometry.

Figure 1.- Details of models. Dimensions are given in centimeters (inches) unless otherwise specified.



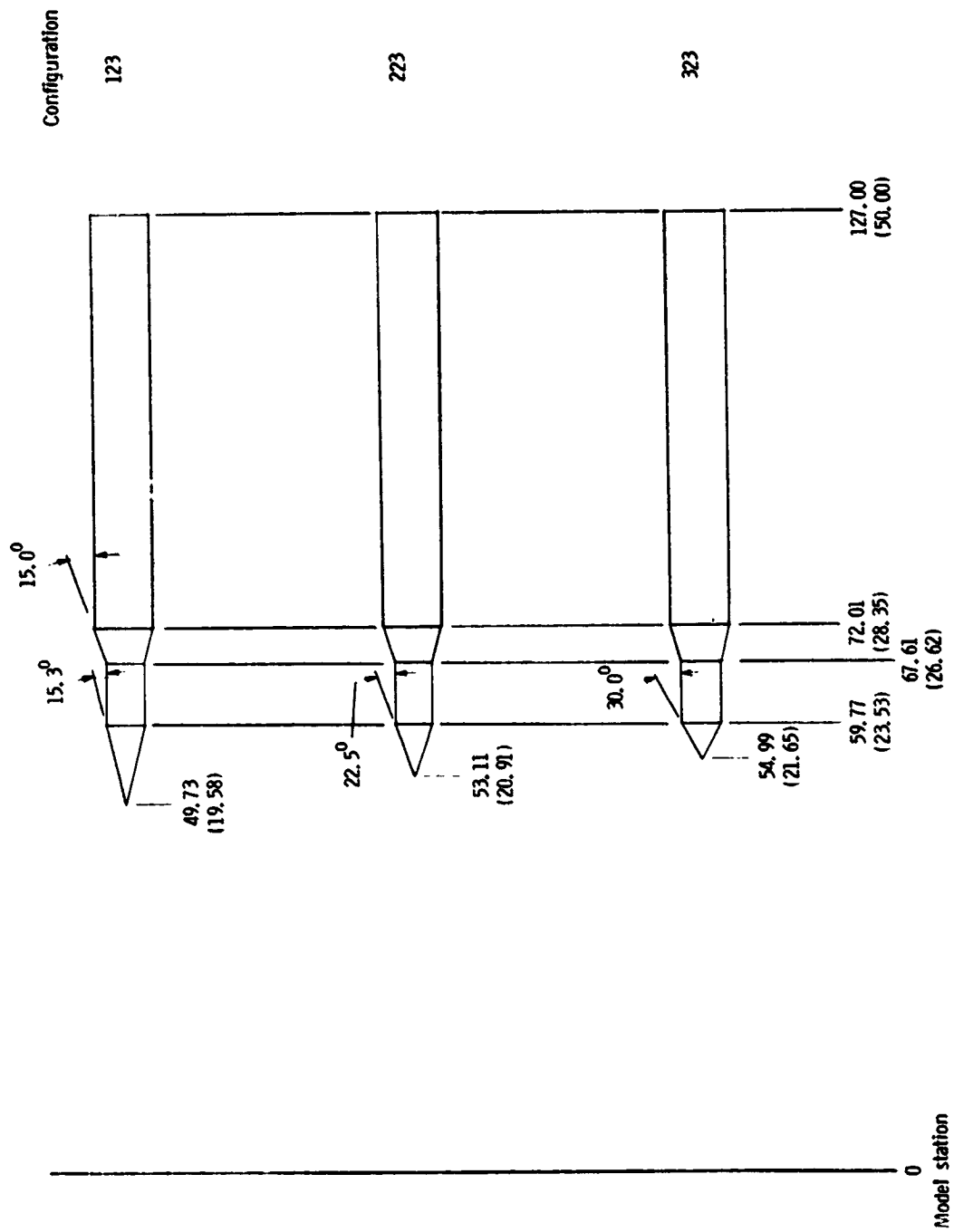
(b) Configurations 121, 221, and 321.

Figure 1.- Continued.



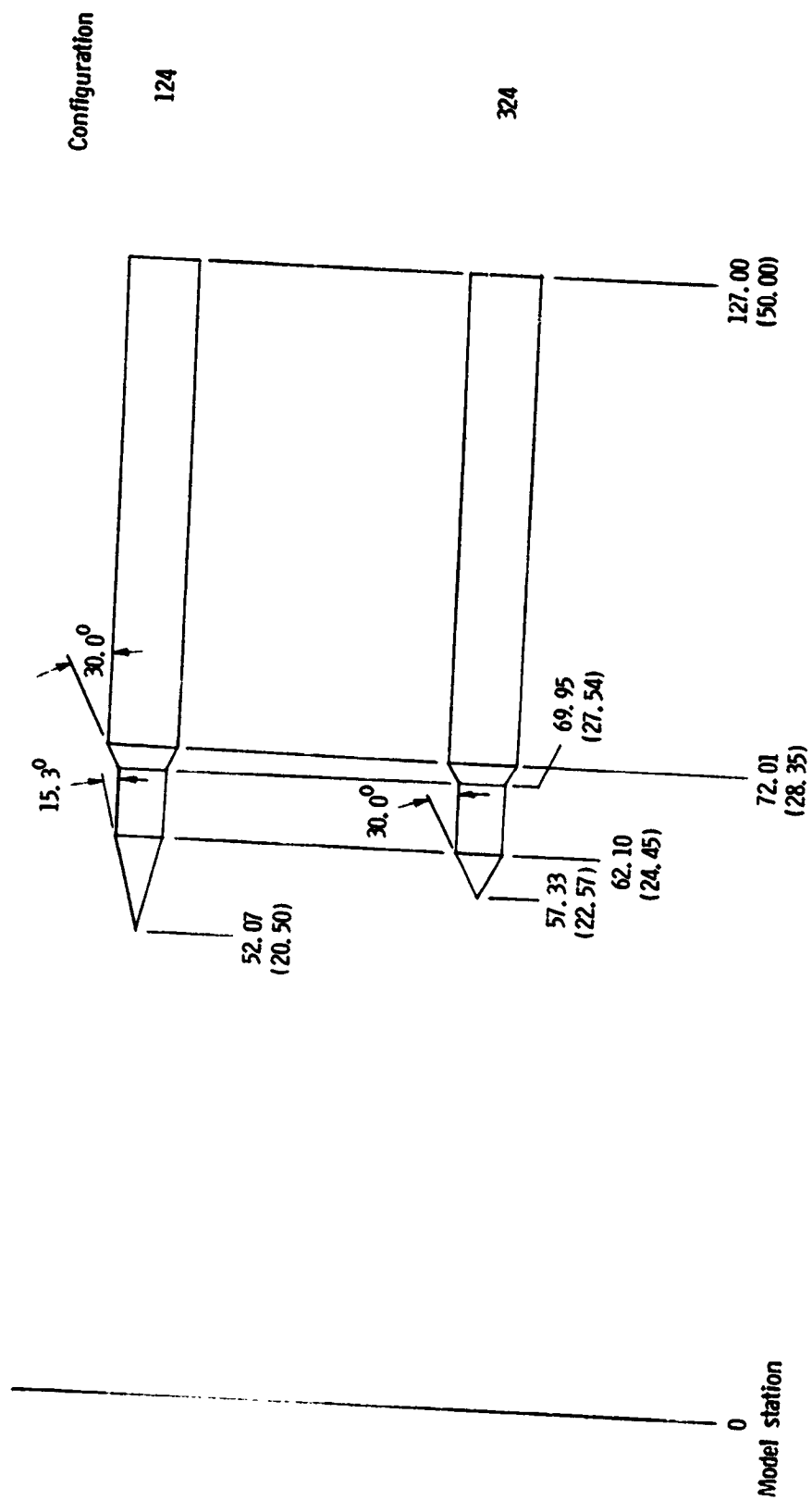
(c) Configurations 122, 222, and 322.

Figure 1.- Continued.



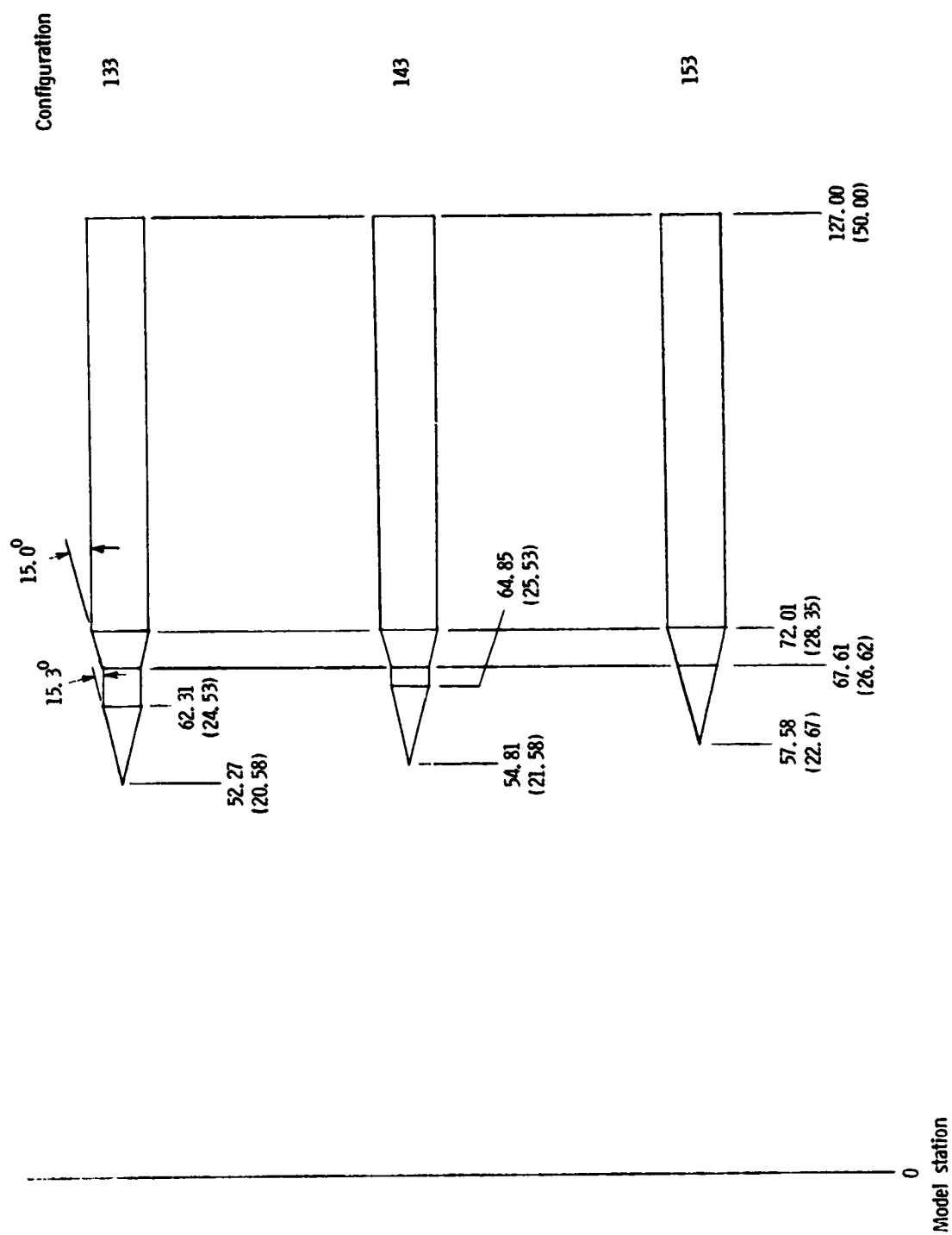
(d) Configurations 123, 223, and 323.

Figure 1.- Continued.



(e) Configurations 124 and 324.

Figure 1.- Continued.



(f) Configurations 133, 143, and 153.

Figure 1.- Concluded.

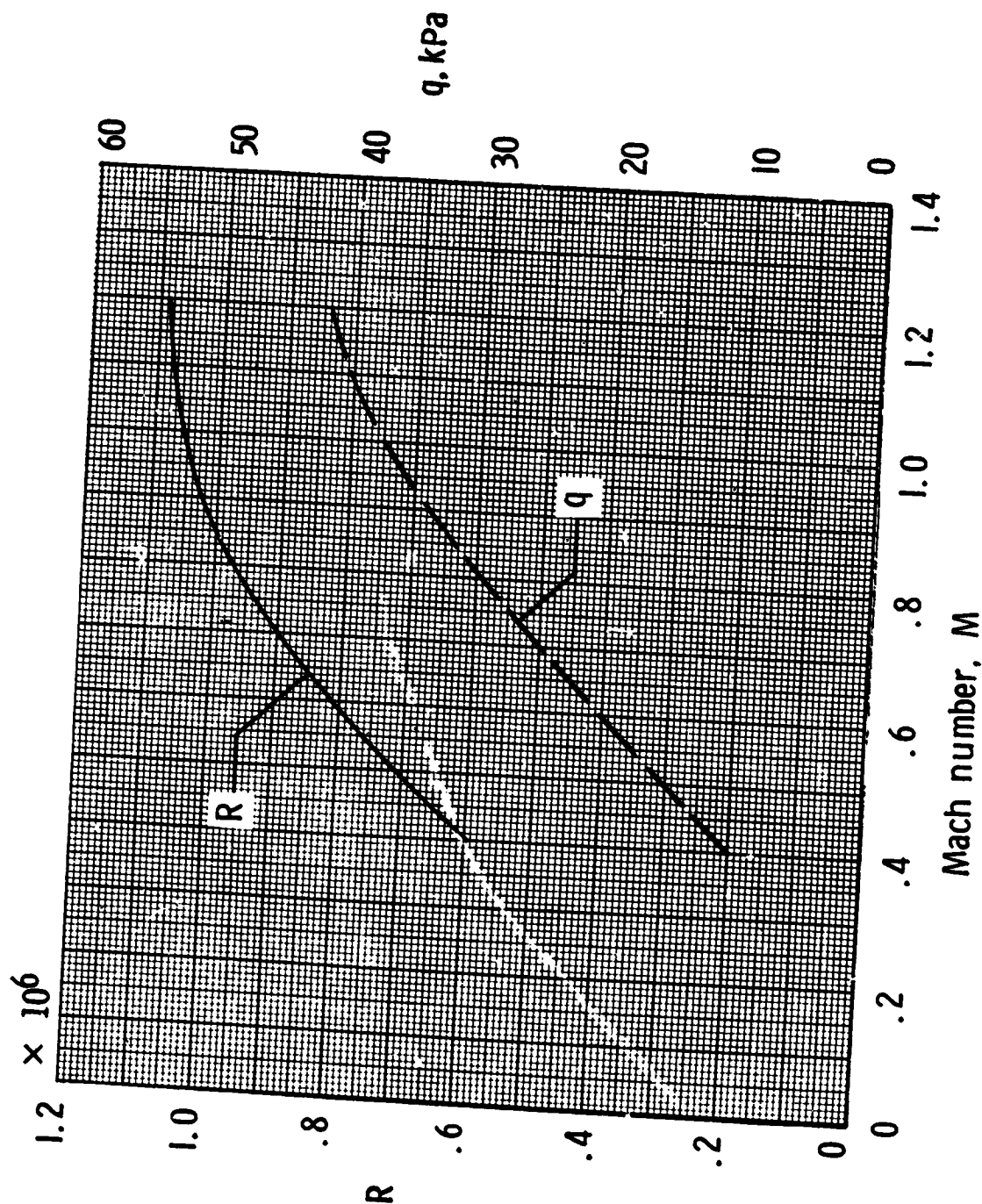
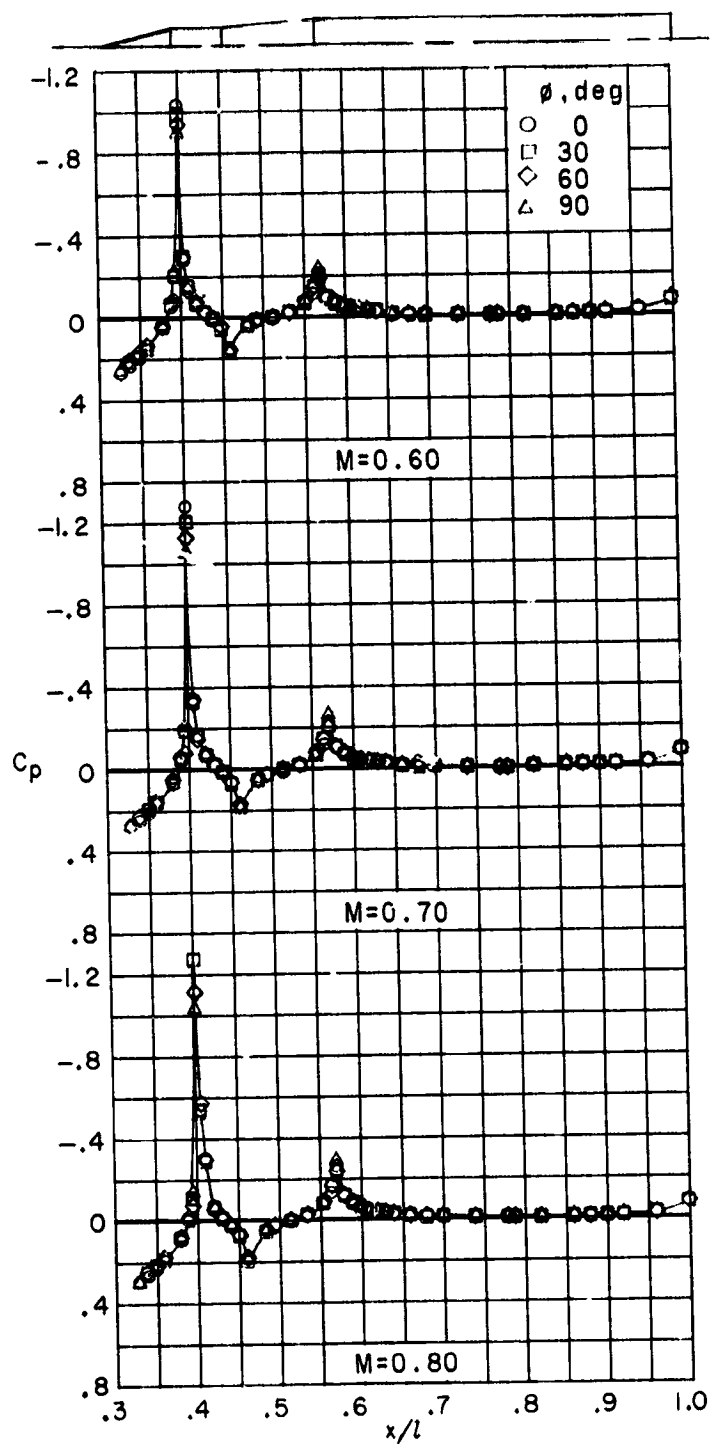


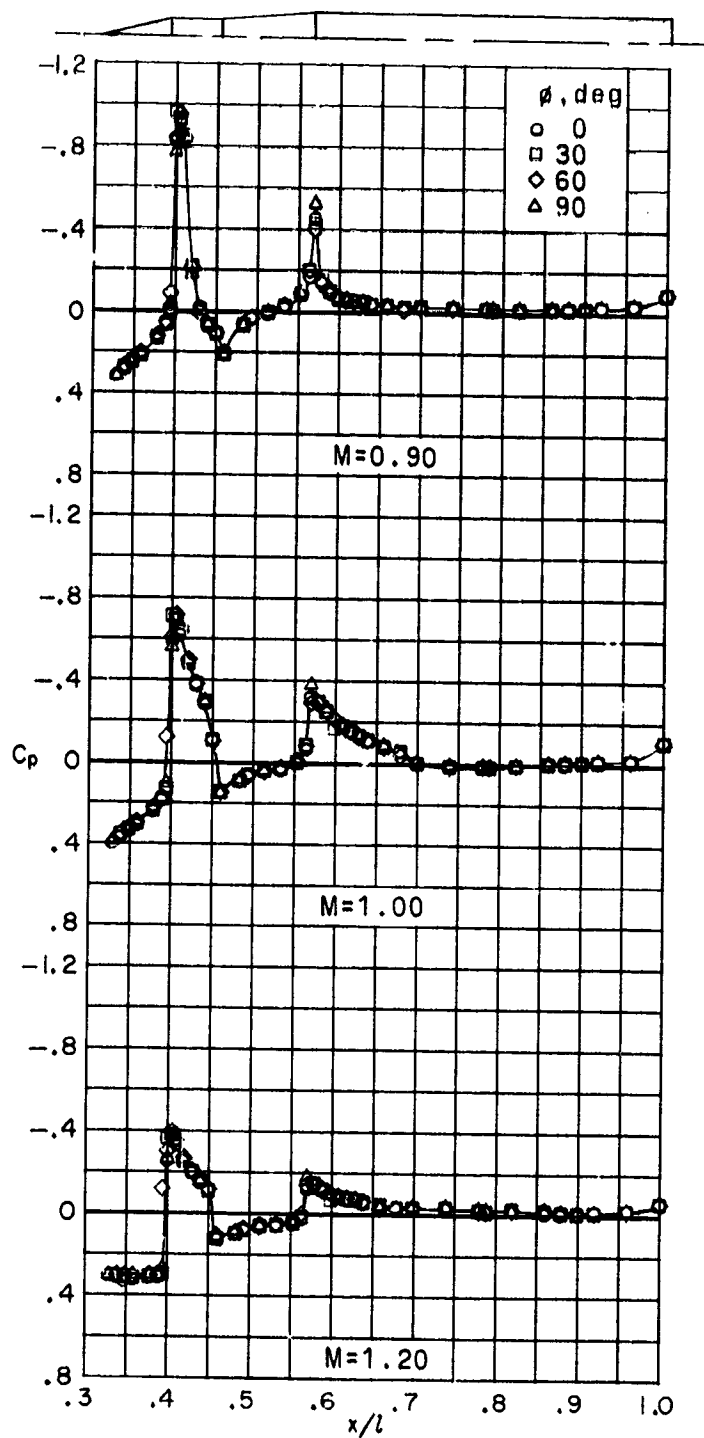
Figure 2.- Variation with Mach number of average test Reynolds number per meter and dynamic pressure.

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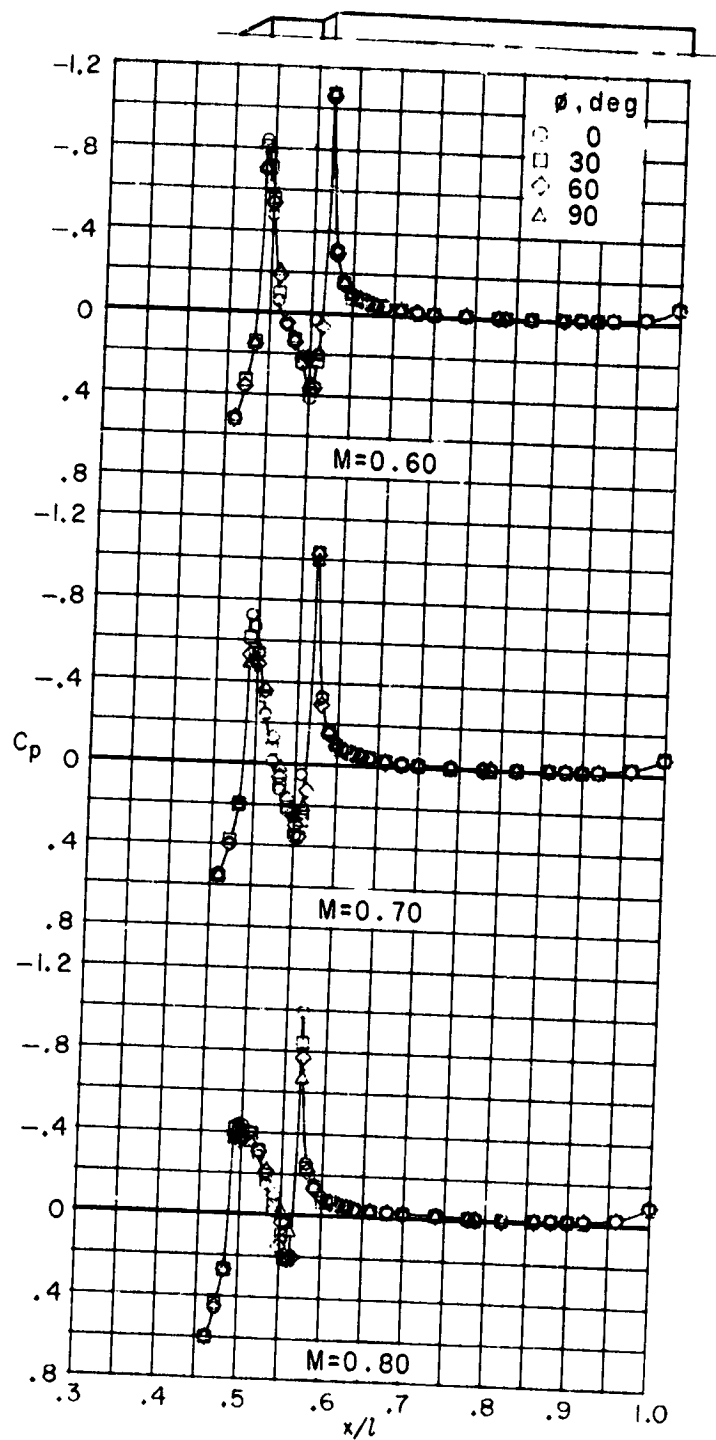
(a) Configuration 121, $\alpha = 0^\circ$.

Figure 3.- Comparison of surface pressure coefficients.



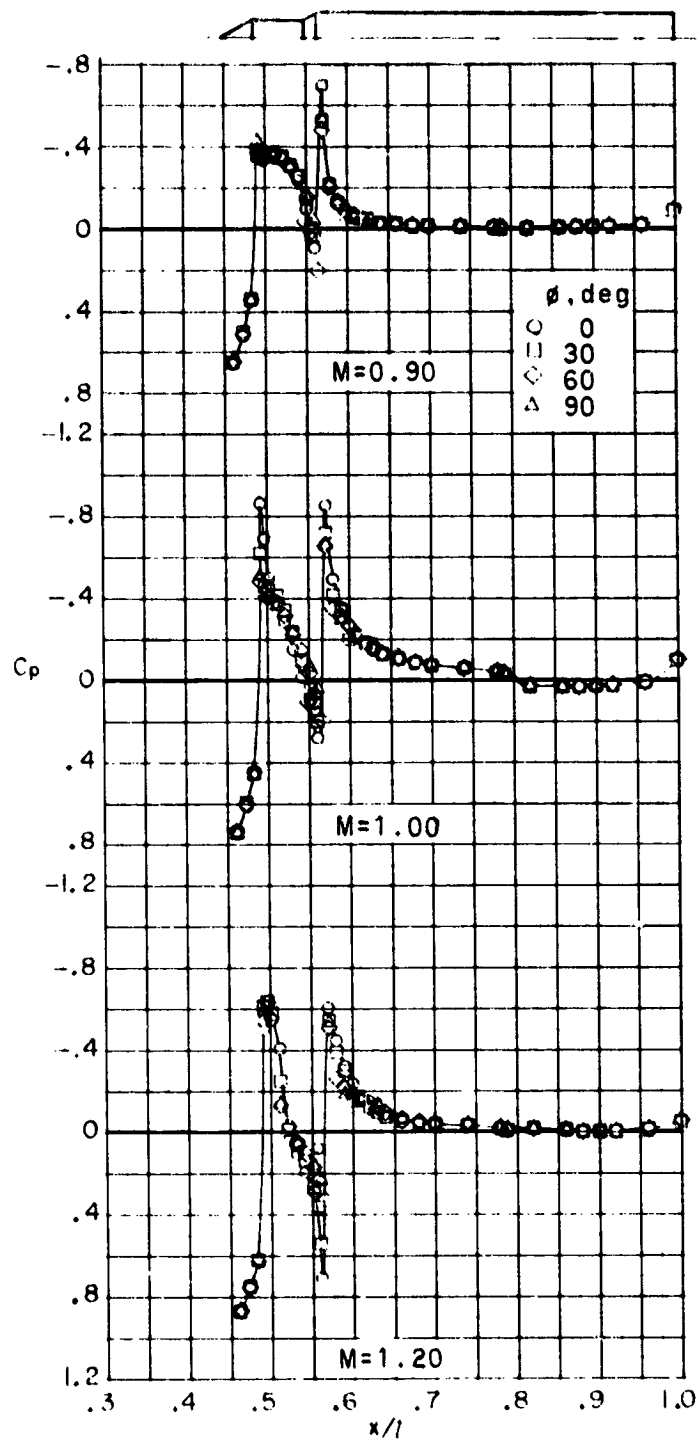
(a) Concluded.

Figure 3.- Continued.



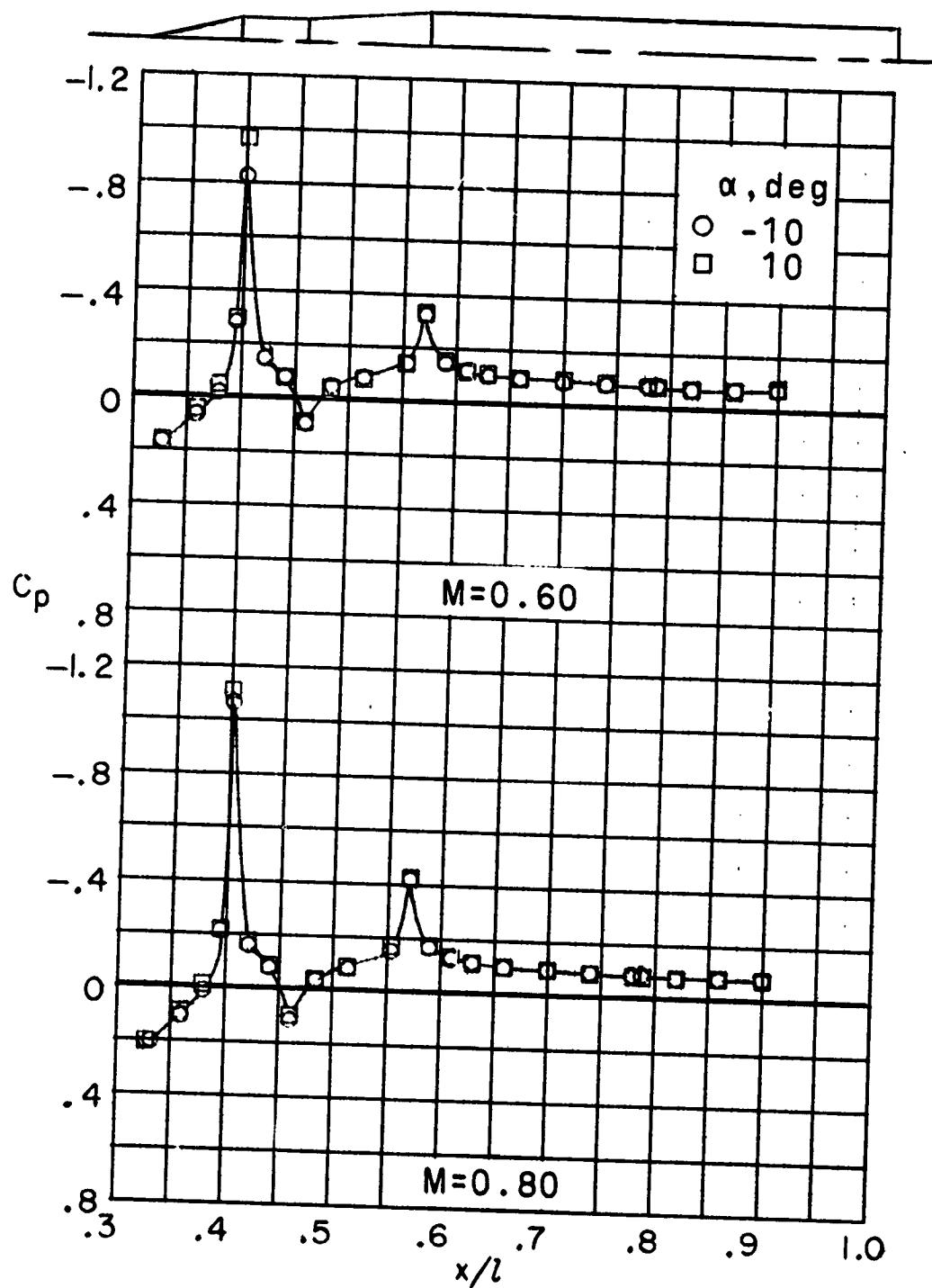
(b) Configuration 324, $\alpha = 0^\circ$.

Figure 3.- Continued.



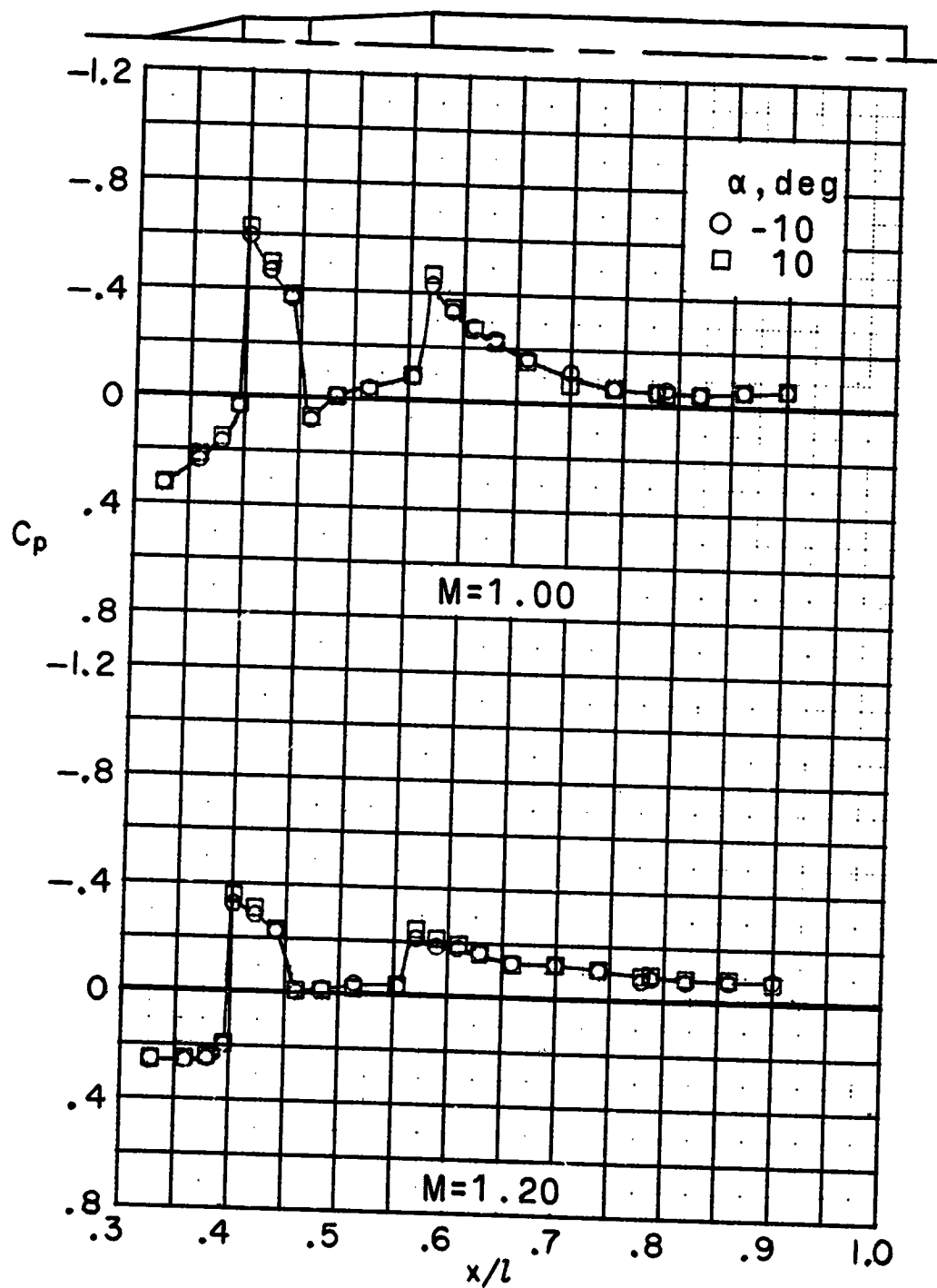
(b) Concluded.

Figure 3.- Continued.



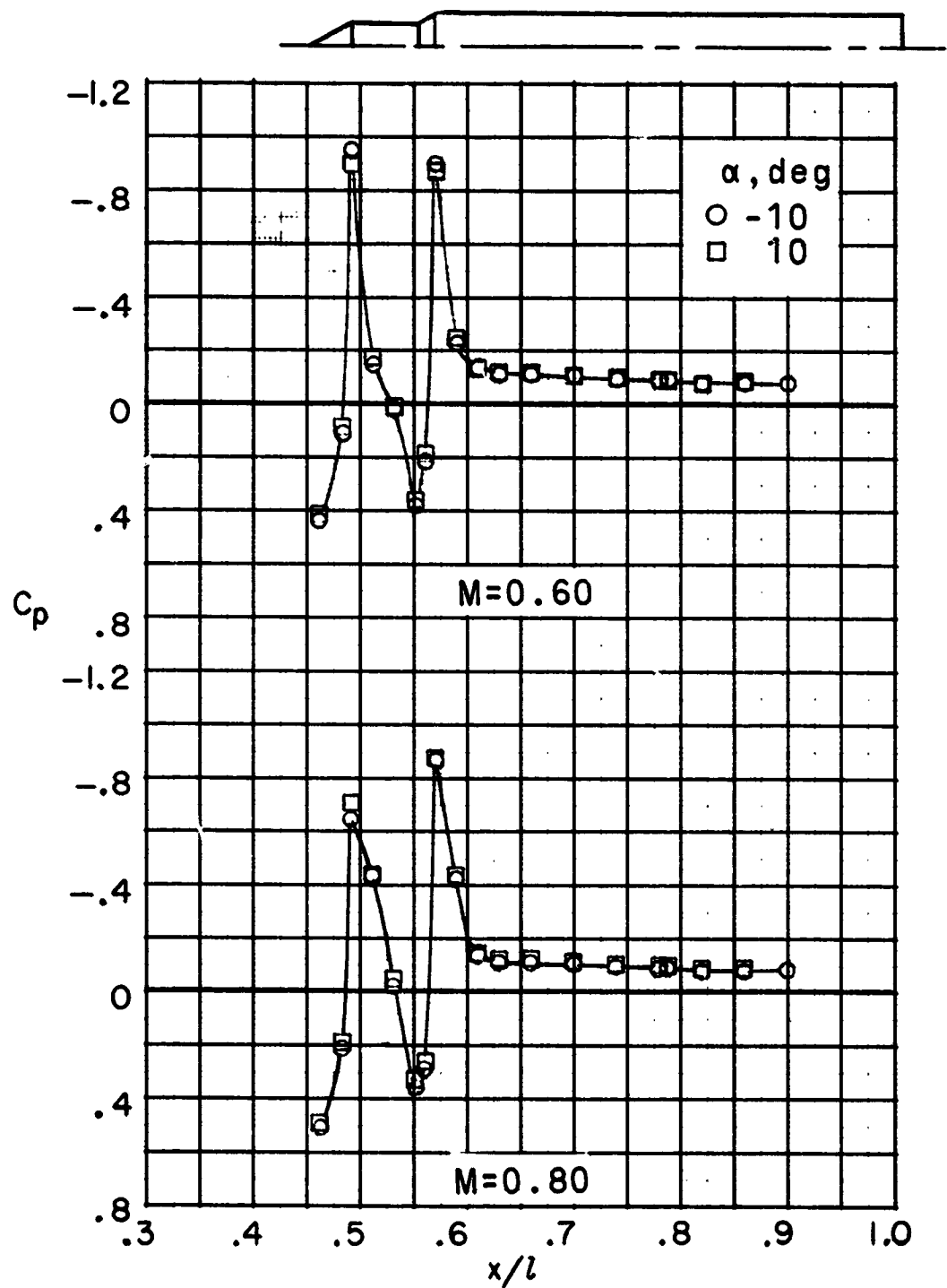
(c) Configuration 121, $\alpha = \pm 10^\circ$.

Figure 3.- Continued.



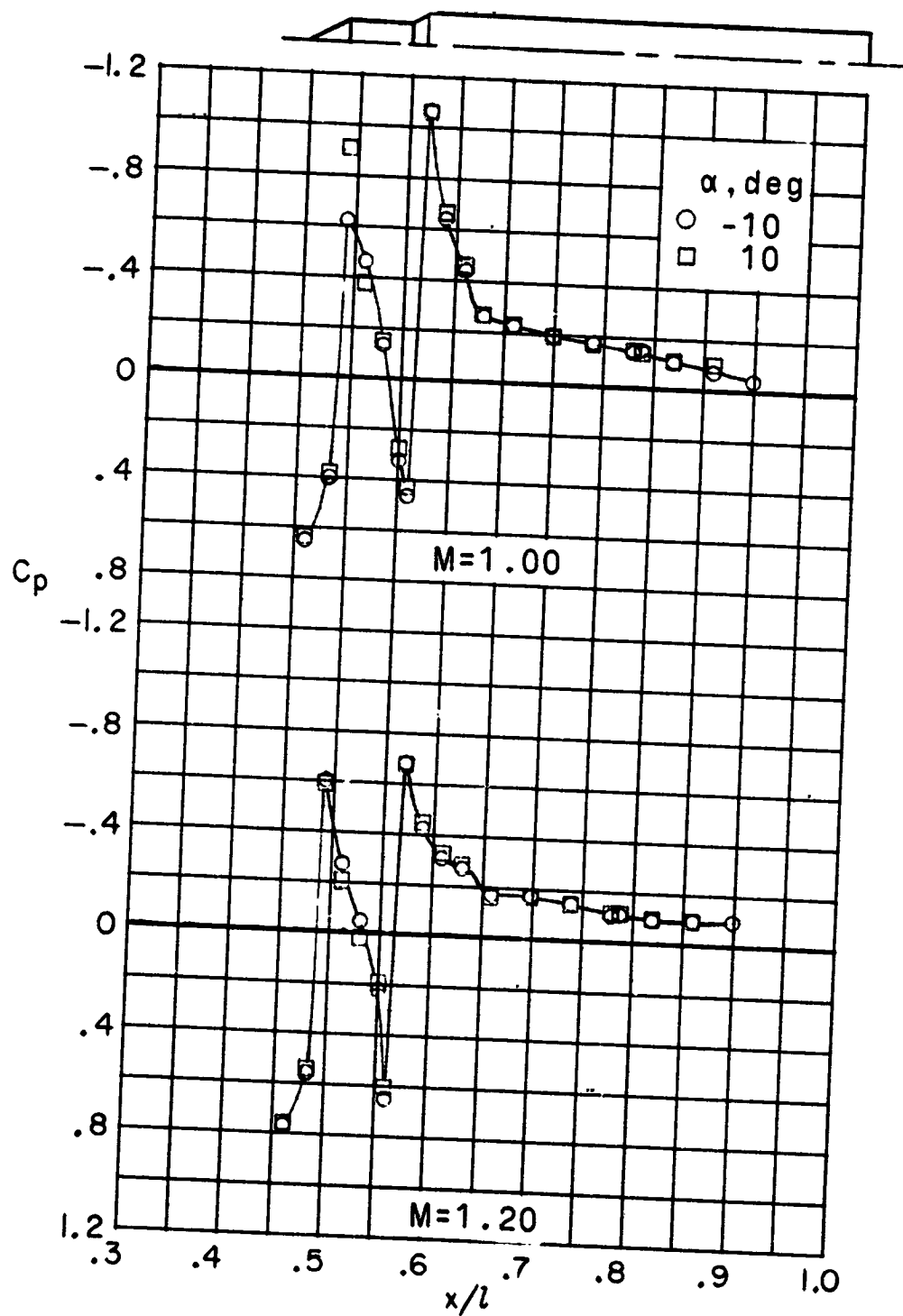
(c) Concluded.

Figure 3.- Continued.



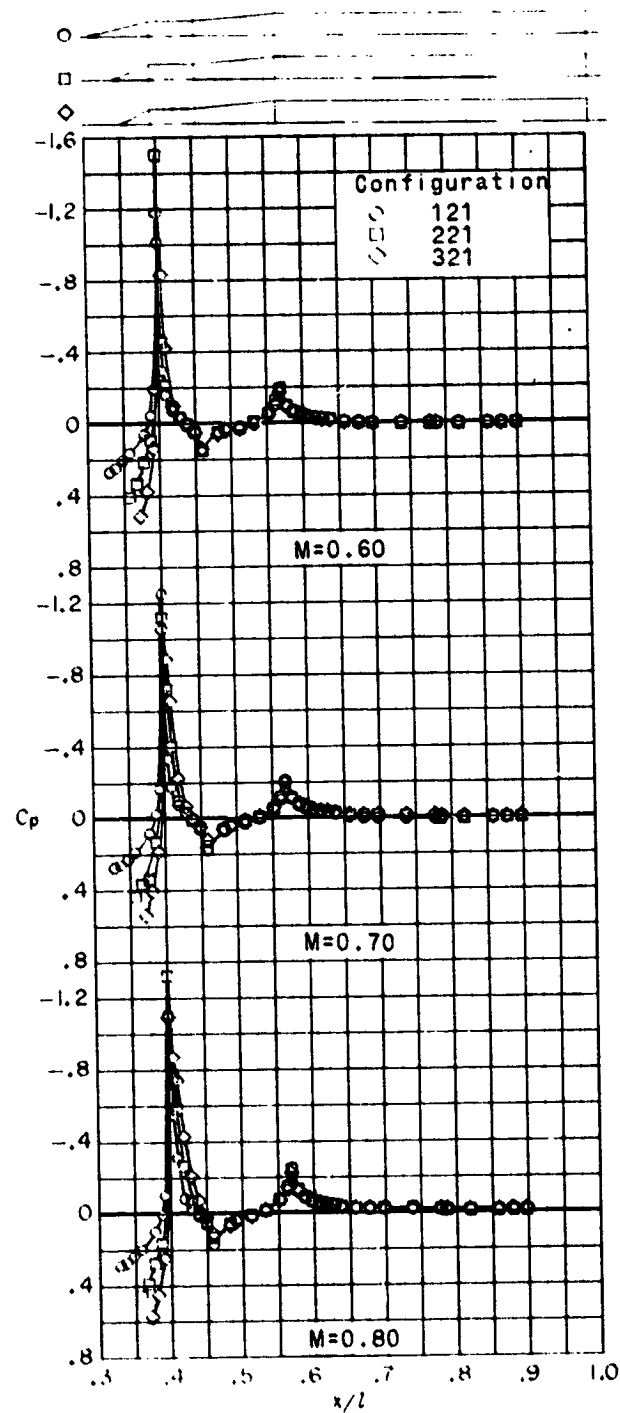
(d) Configuration 324, $\alpha = \pm 10^\circ$.

Figure 3.- Continued.



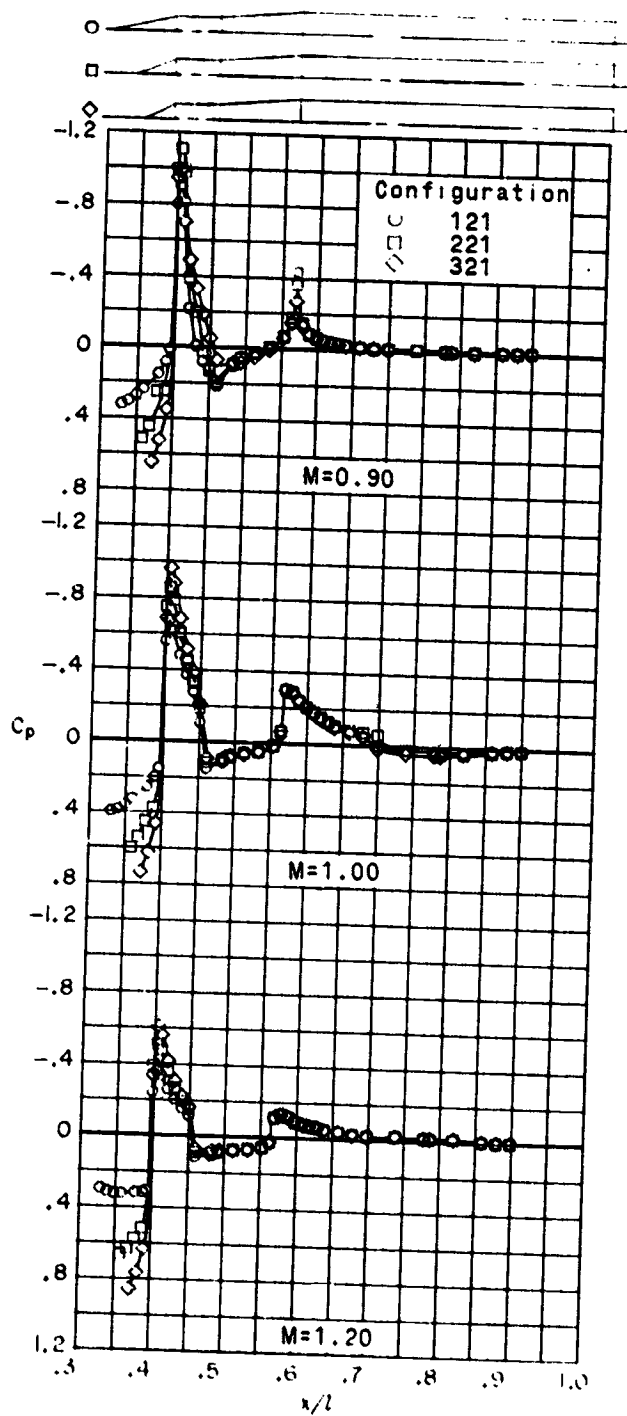
(d) Concluded.

Figure 3.- Concluded.



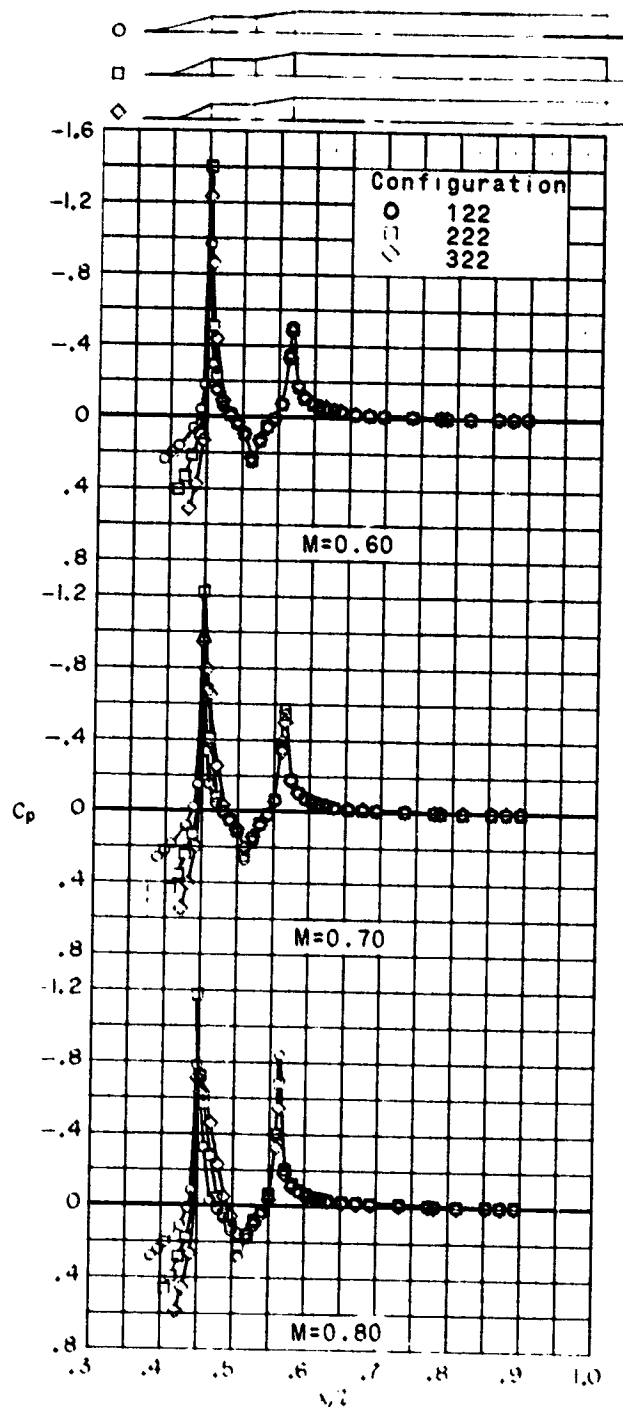
(a) $\delta_F = 5^\circ$.

Figure 4.- Effects of variation in nose-cone angle for $\phi = 0^\circ$ and $\alpha = 0^\circ$.



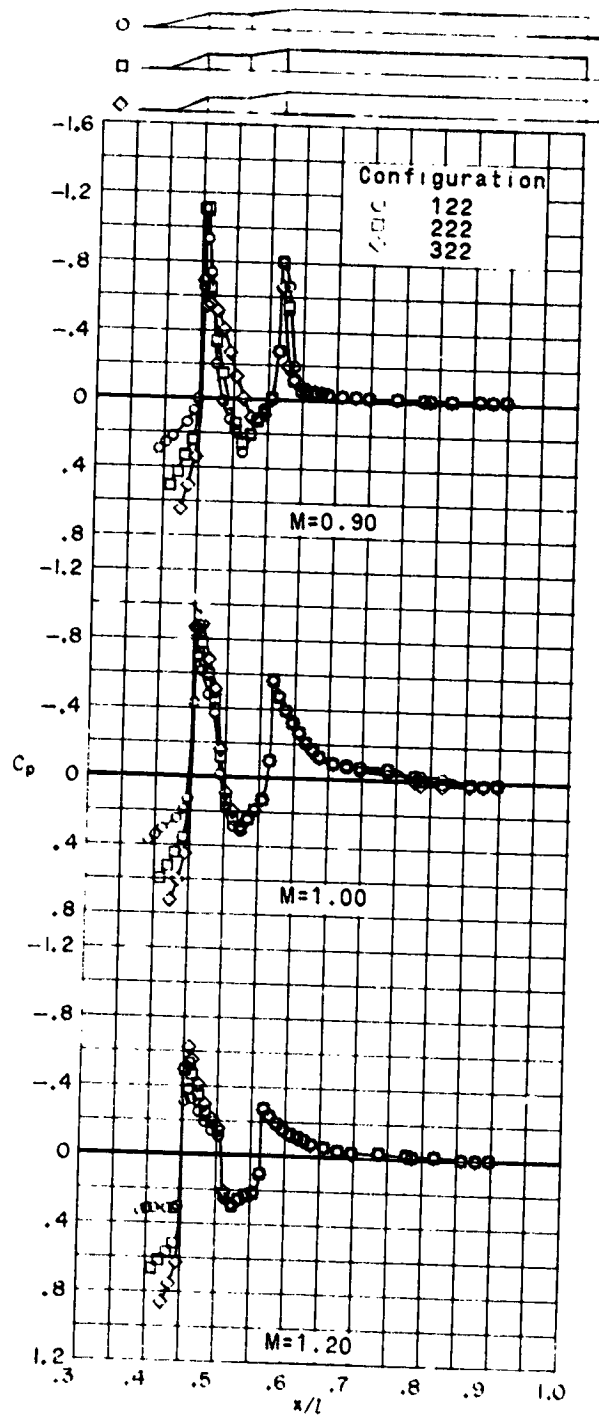
(a) Concluded.

Figure 4.- Continued.



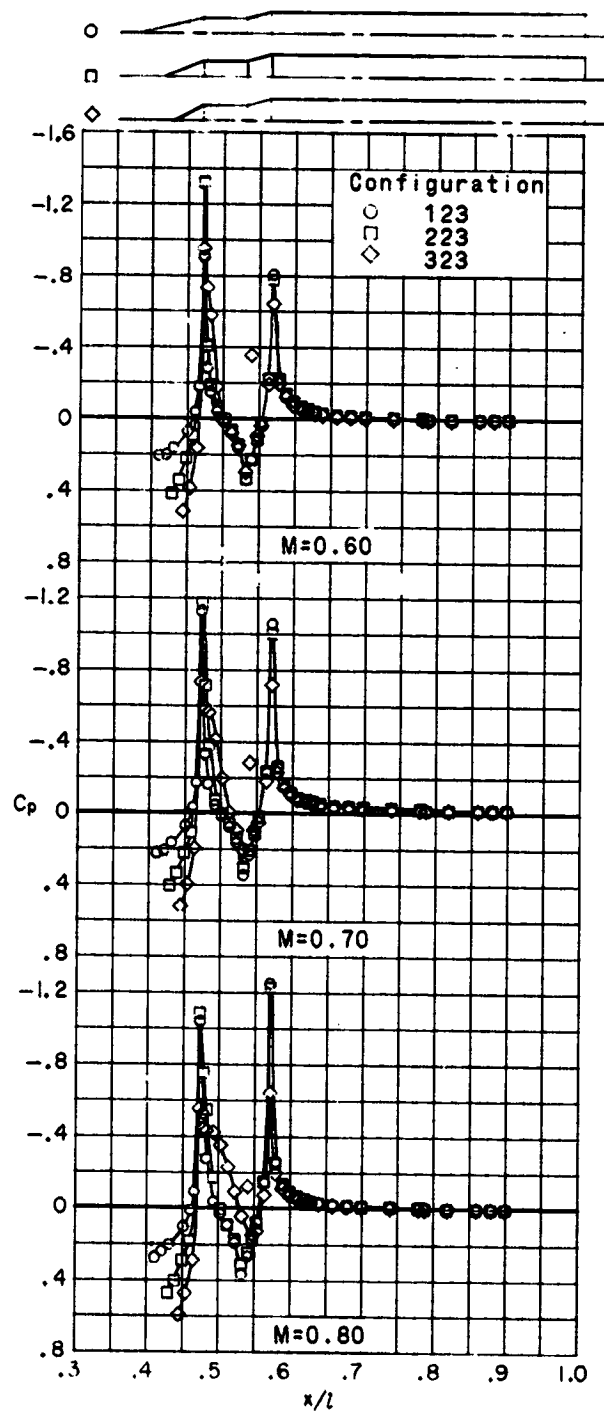
(b) $\delta_F = 10.1^\circ$.

Figure 4.- Continued.



(b) Concluded.

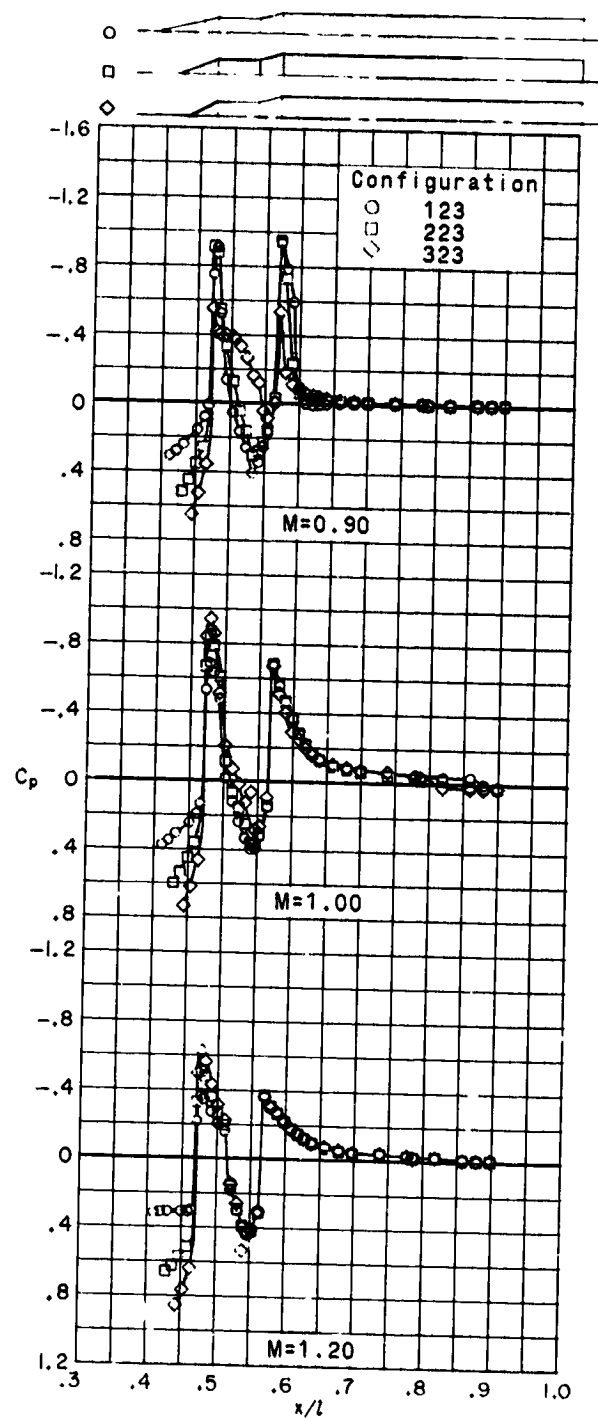
Figure 4.- Continued.



(c) $\delta_F = 15^\circ$.

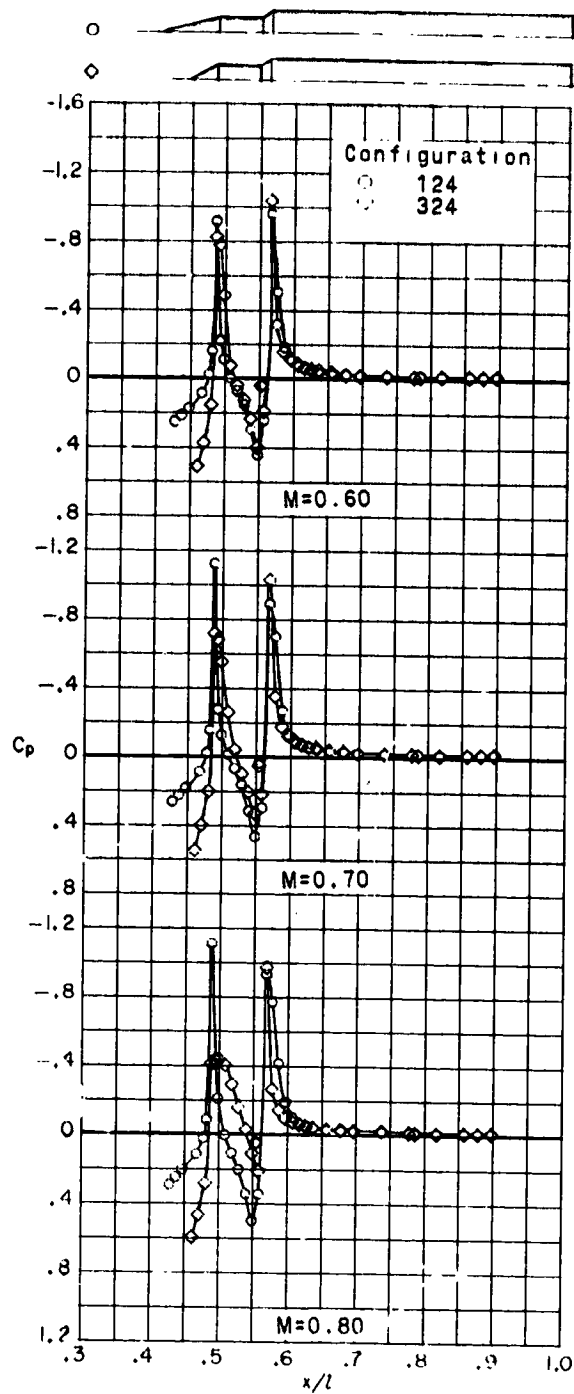
Figure 4.- Continued.

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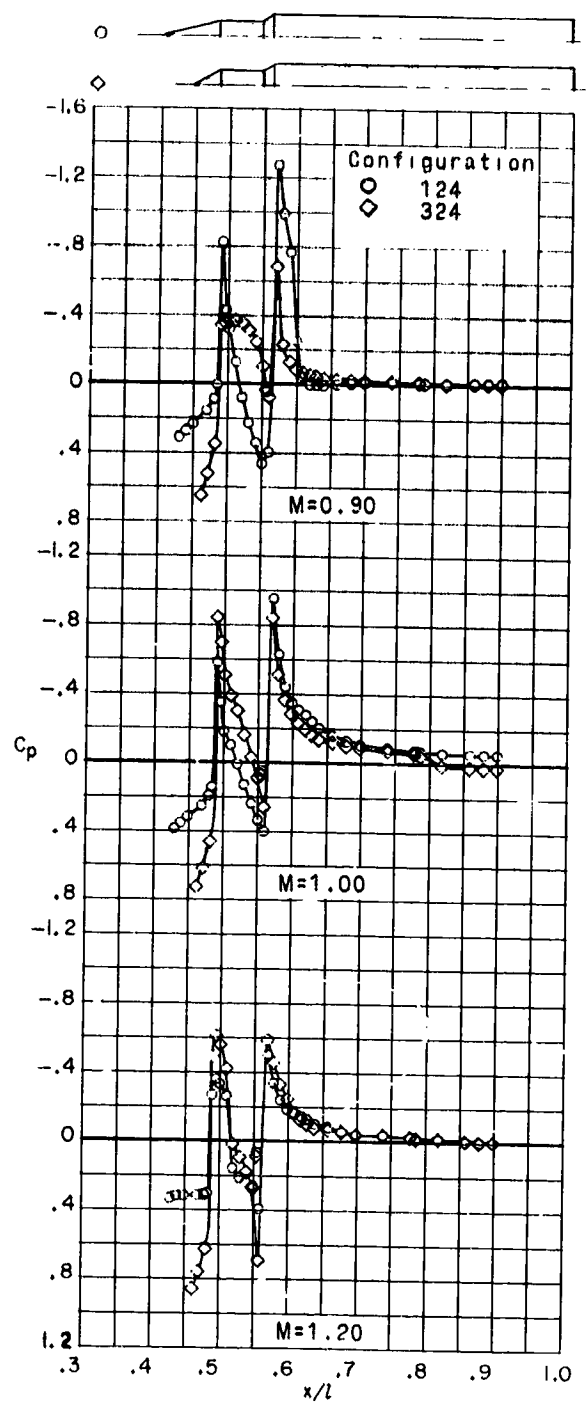
(c) Concluded.

Figure 4.- Continued.



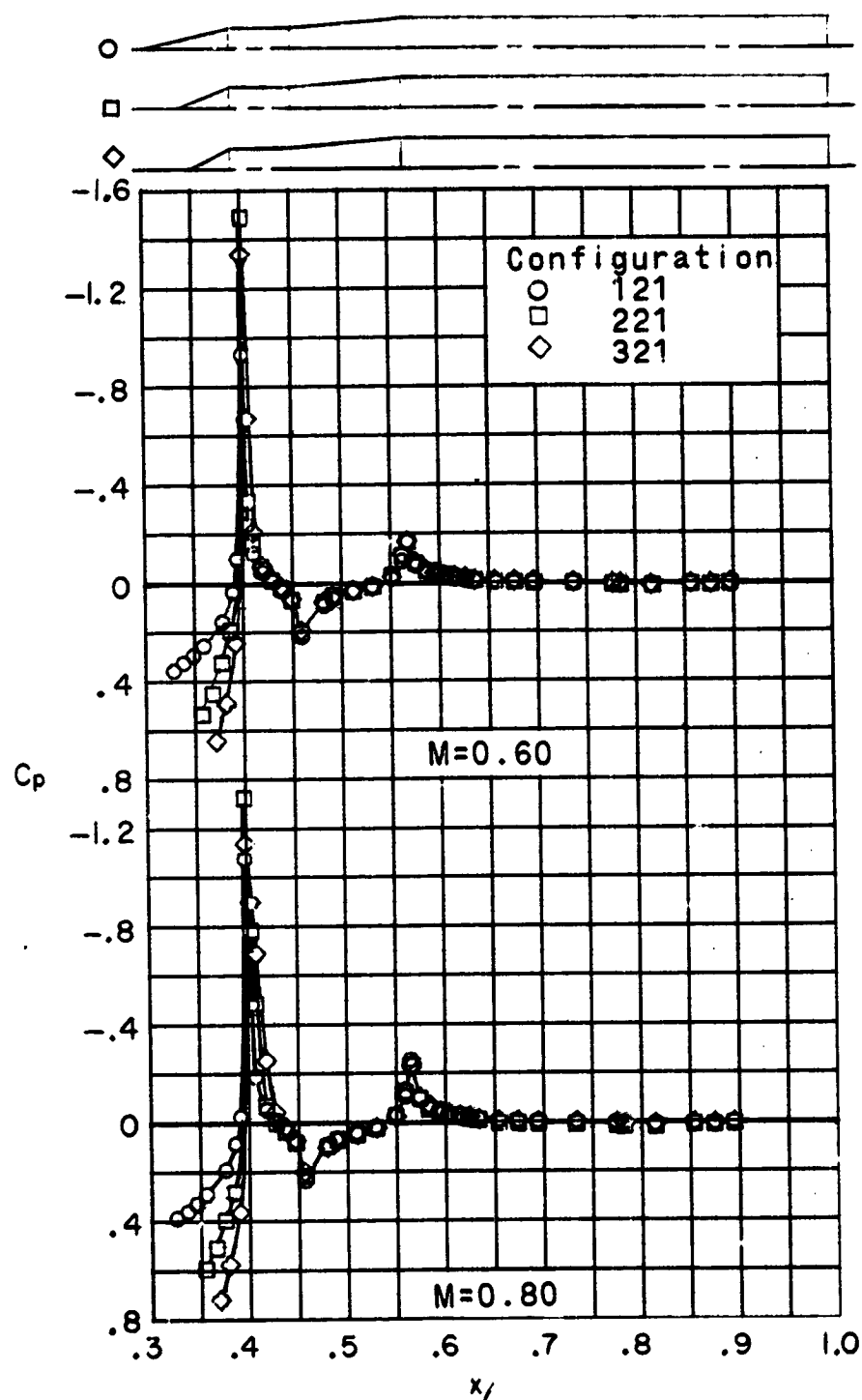
(d) $\delta_F = 30^\circ$.

Figure 4.- Continued.



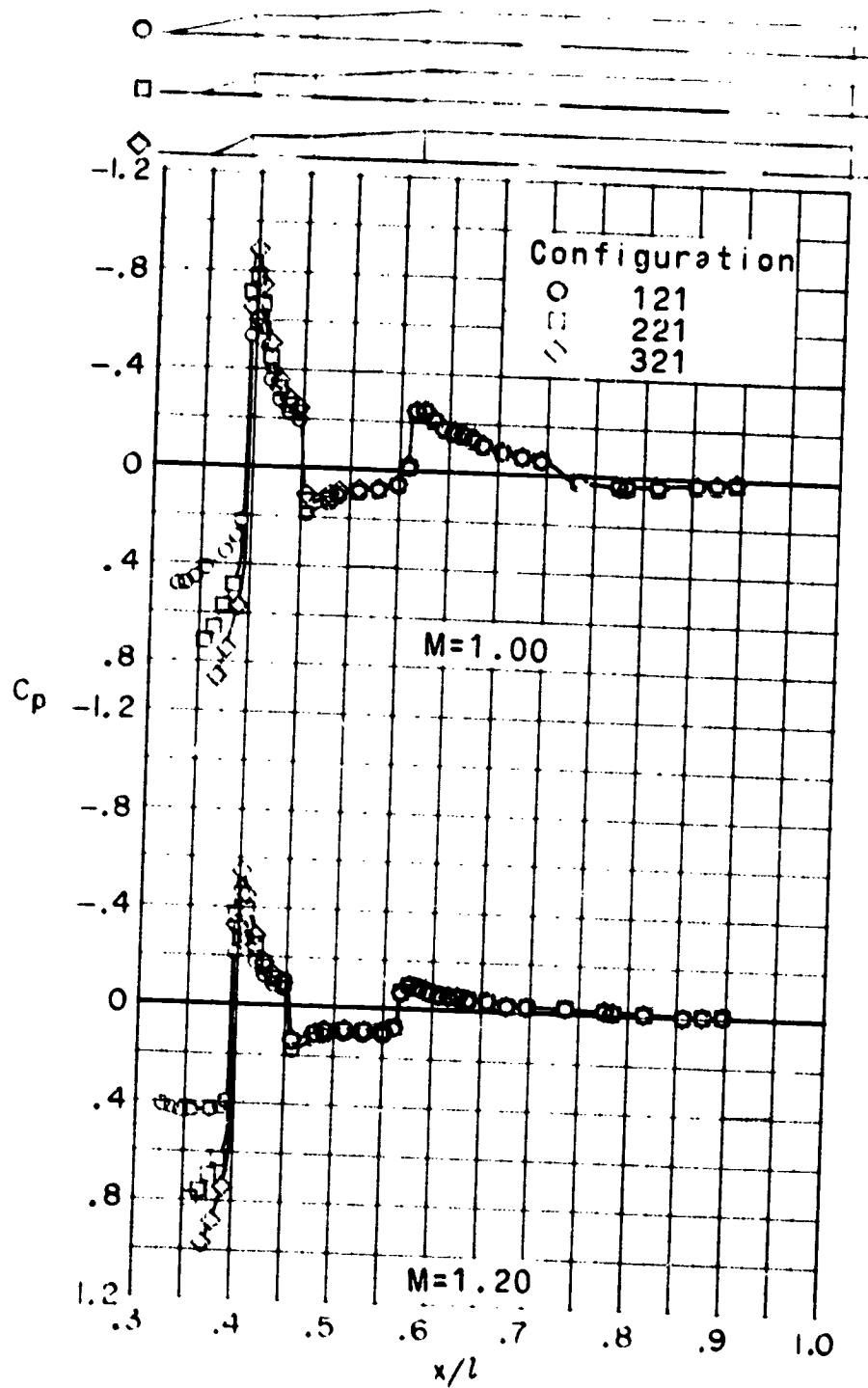
(d) Concluded.

Figure 4.- Concluded.



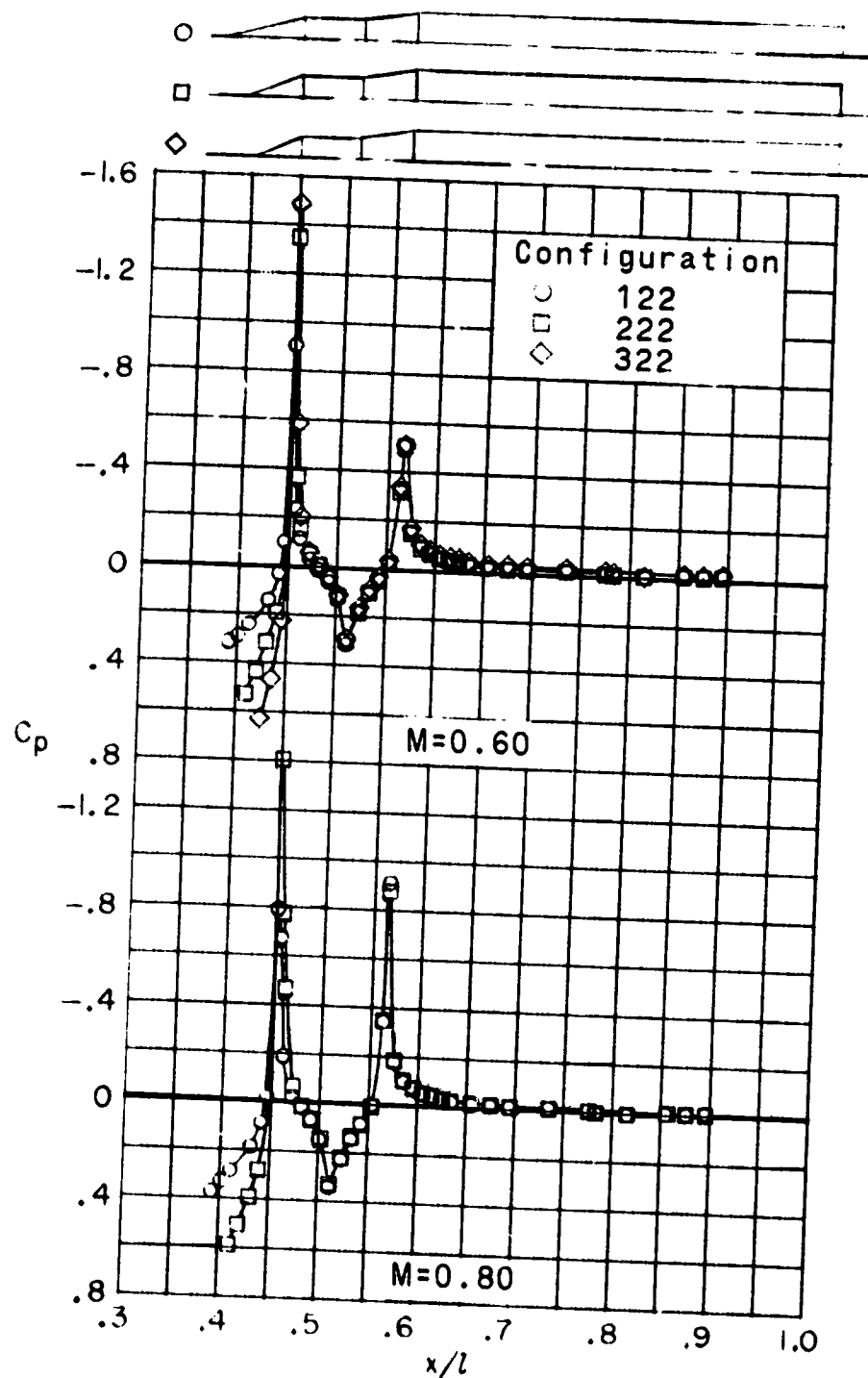
(a) $\delta_F = 5^\circ$.

Figure 5.- Effects of variation in nose-cone angle for $\phi = 0^\circ$ and $\alpha = -6^\circ$.



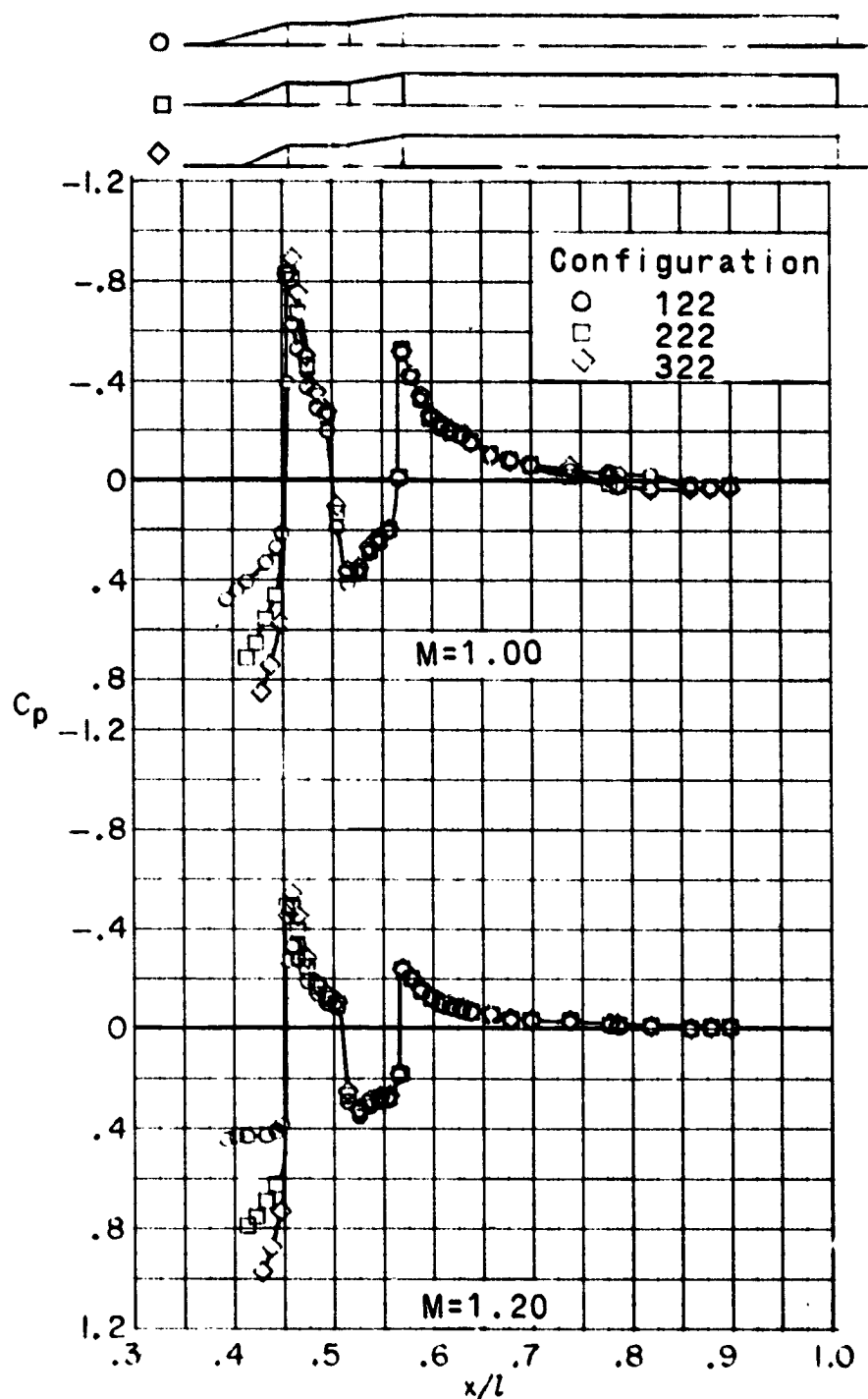
(a) Concluded.

Figure 5.- Continued.



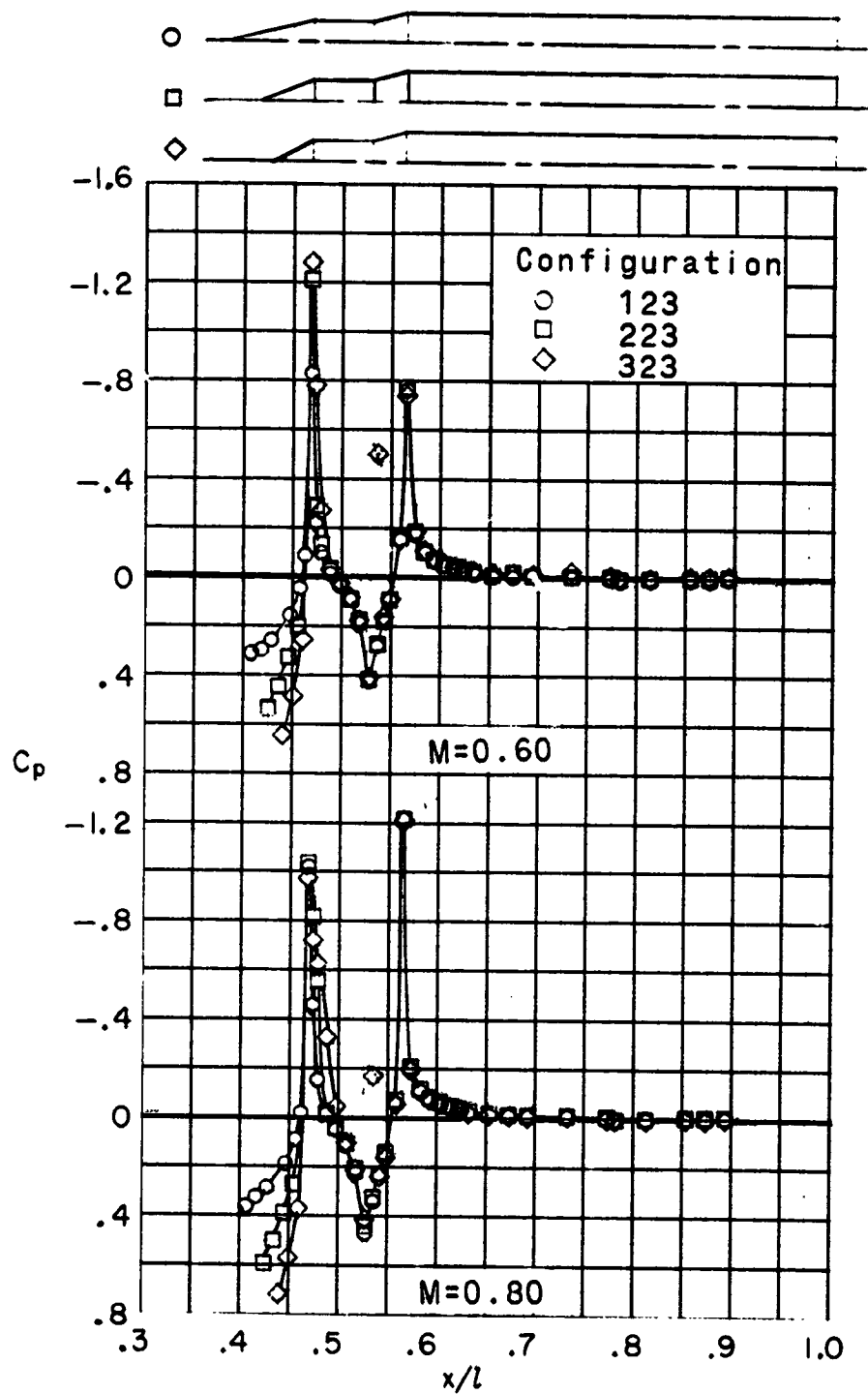
(b) $\delta_F = 10.1^\circ$.

Figure 5.- Continued.



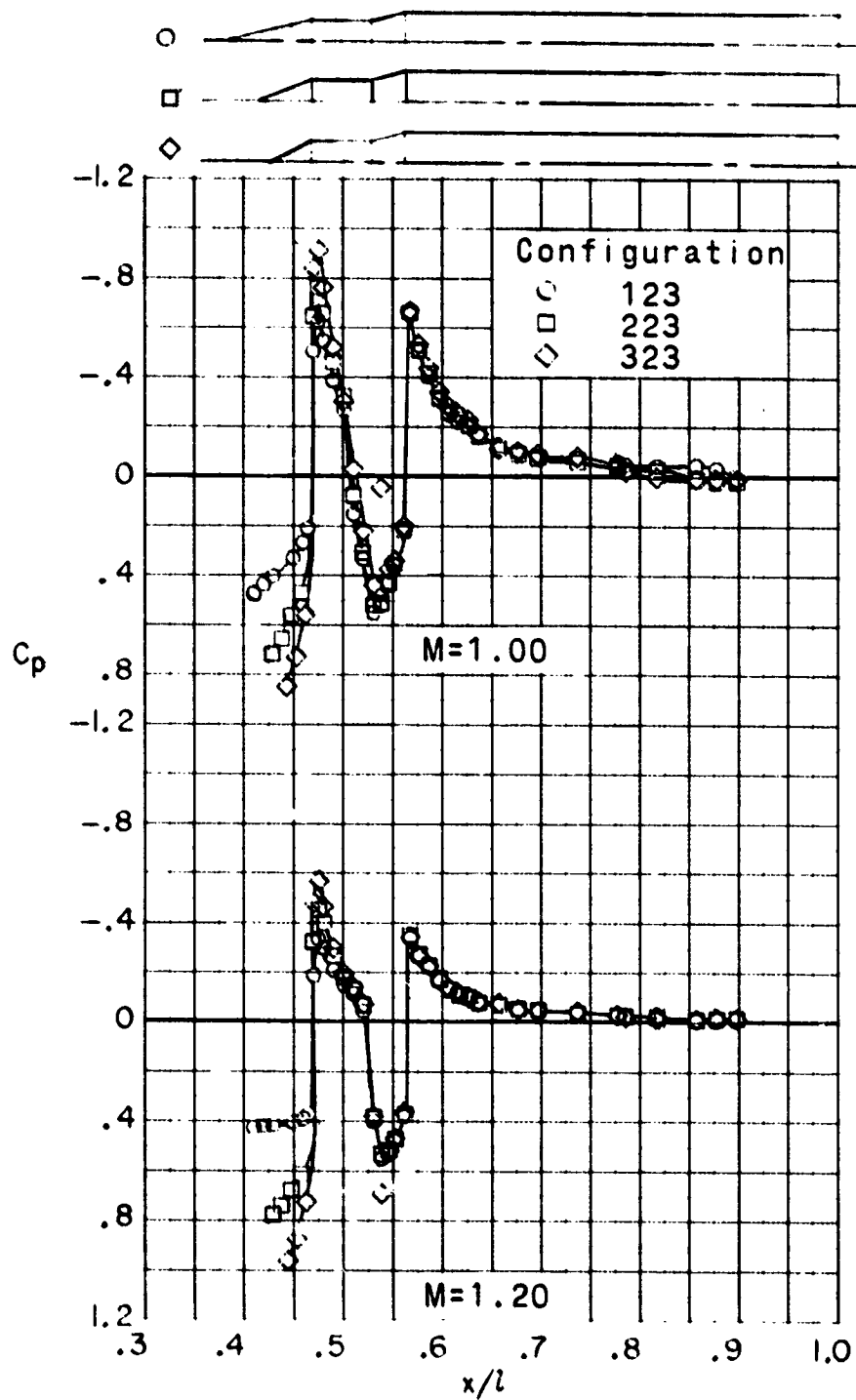
(b) Concluded.

Figure 5.- Continued.



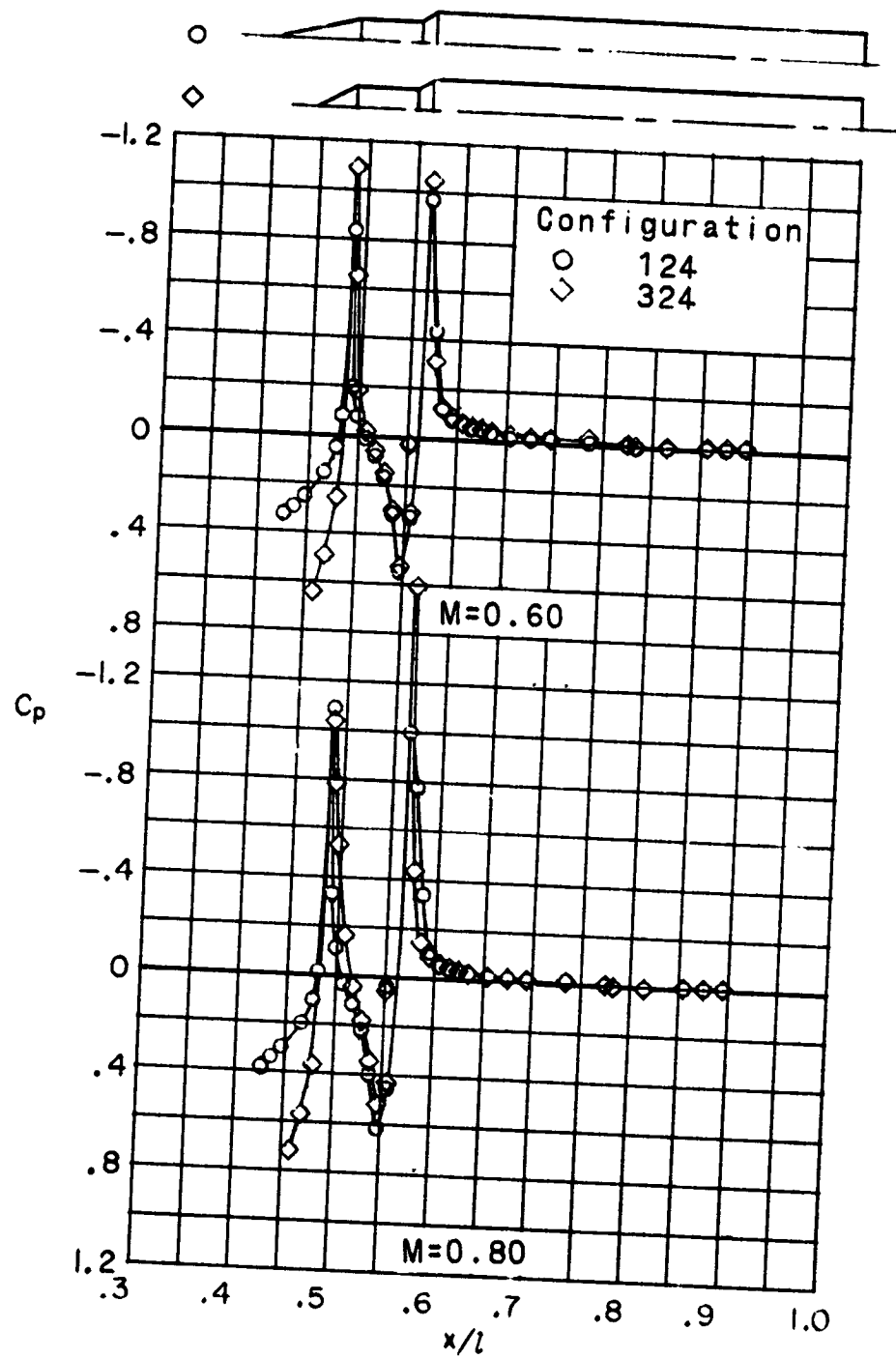
(c) $\delta_F = 15^\circ$.

Figure 5.- Continued.



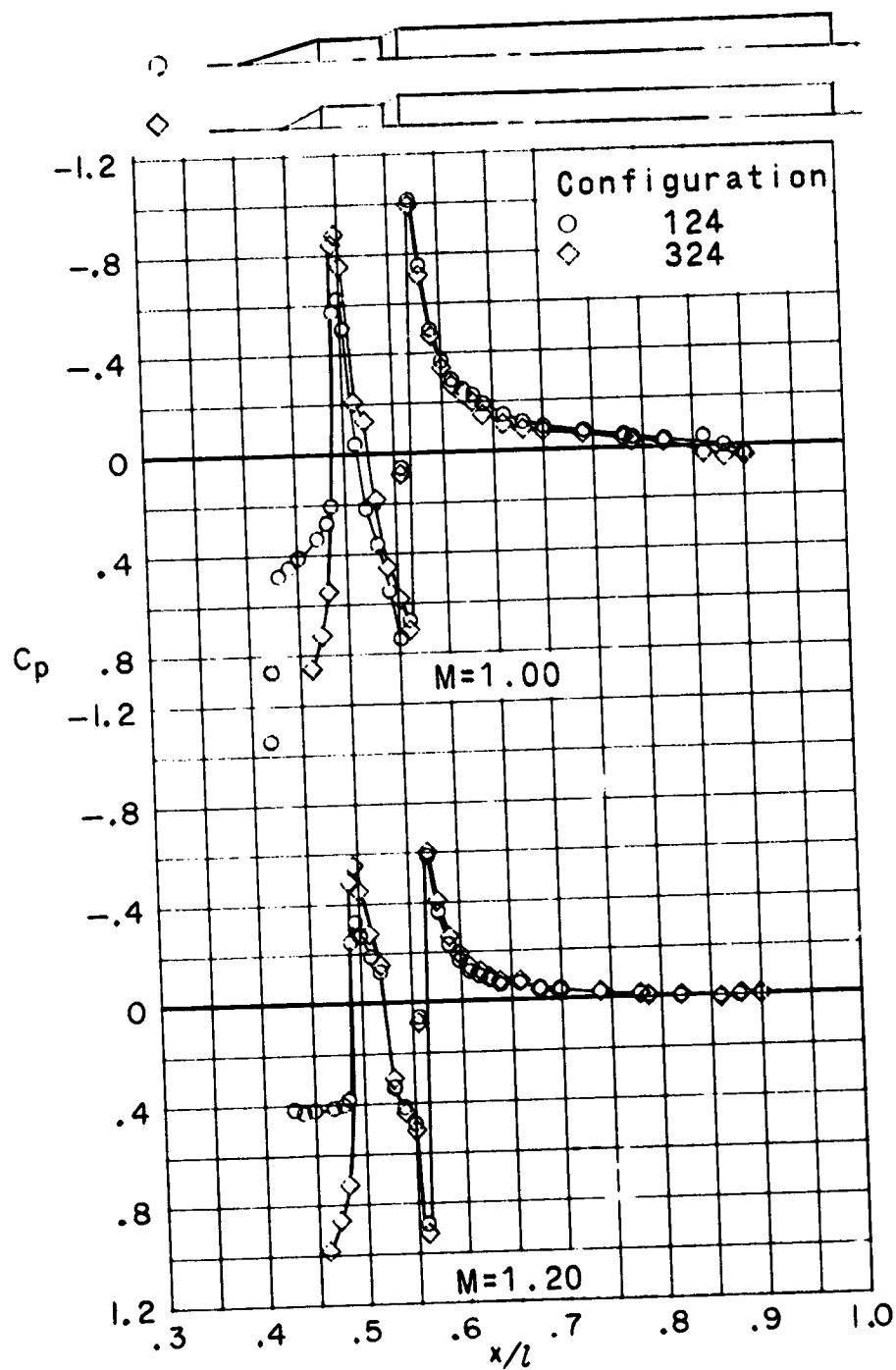
(c) Concluded.

Figure 5.- Continued.



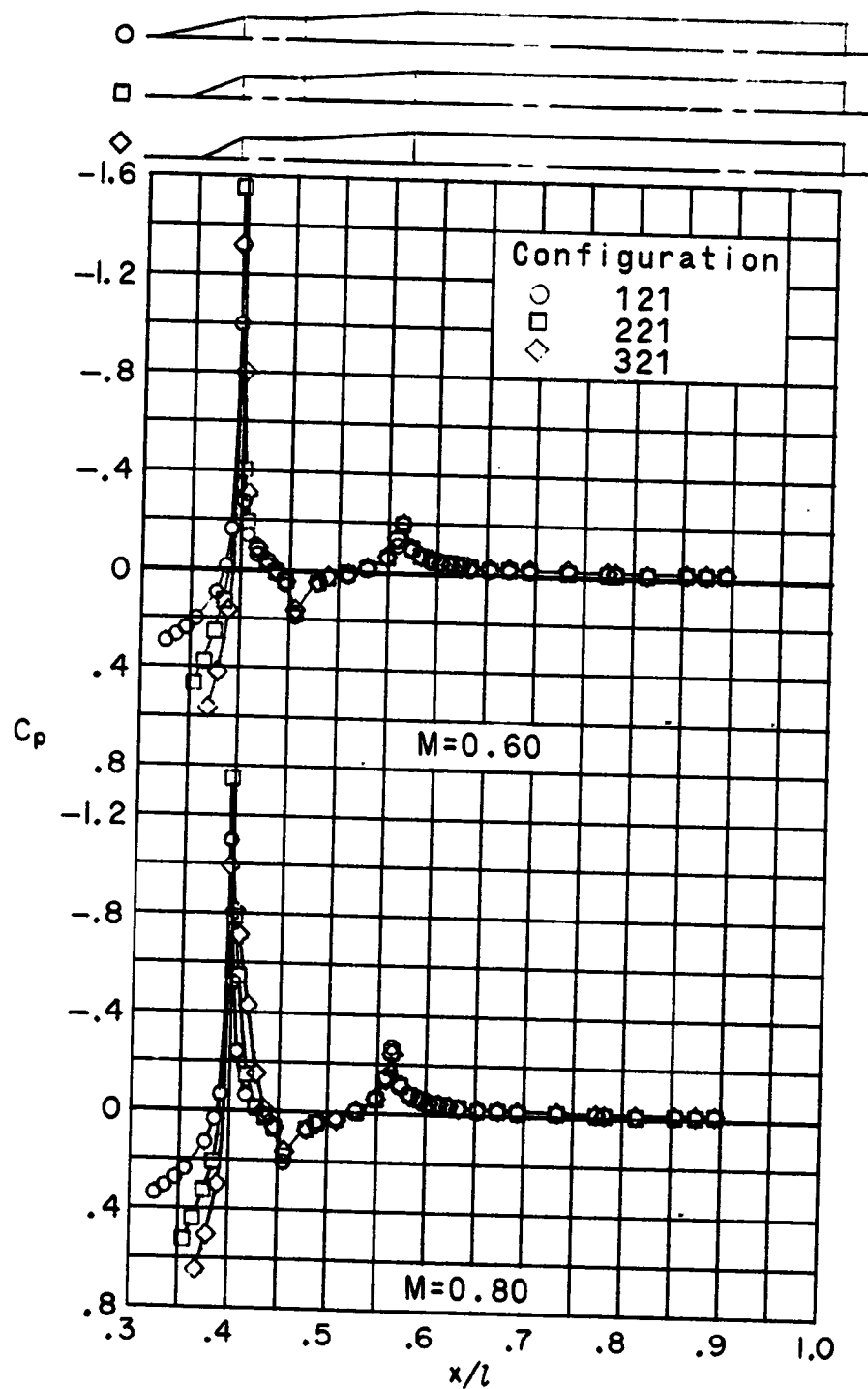
(d) $\delta_F = 30^\circ$.

Figure 5.- Continued.



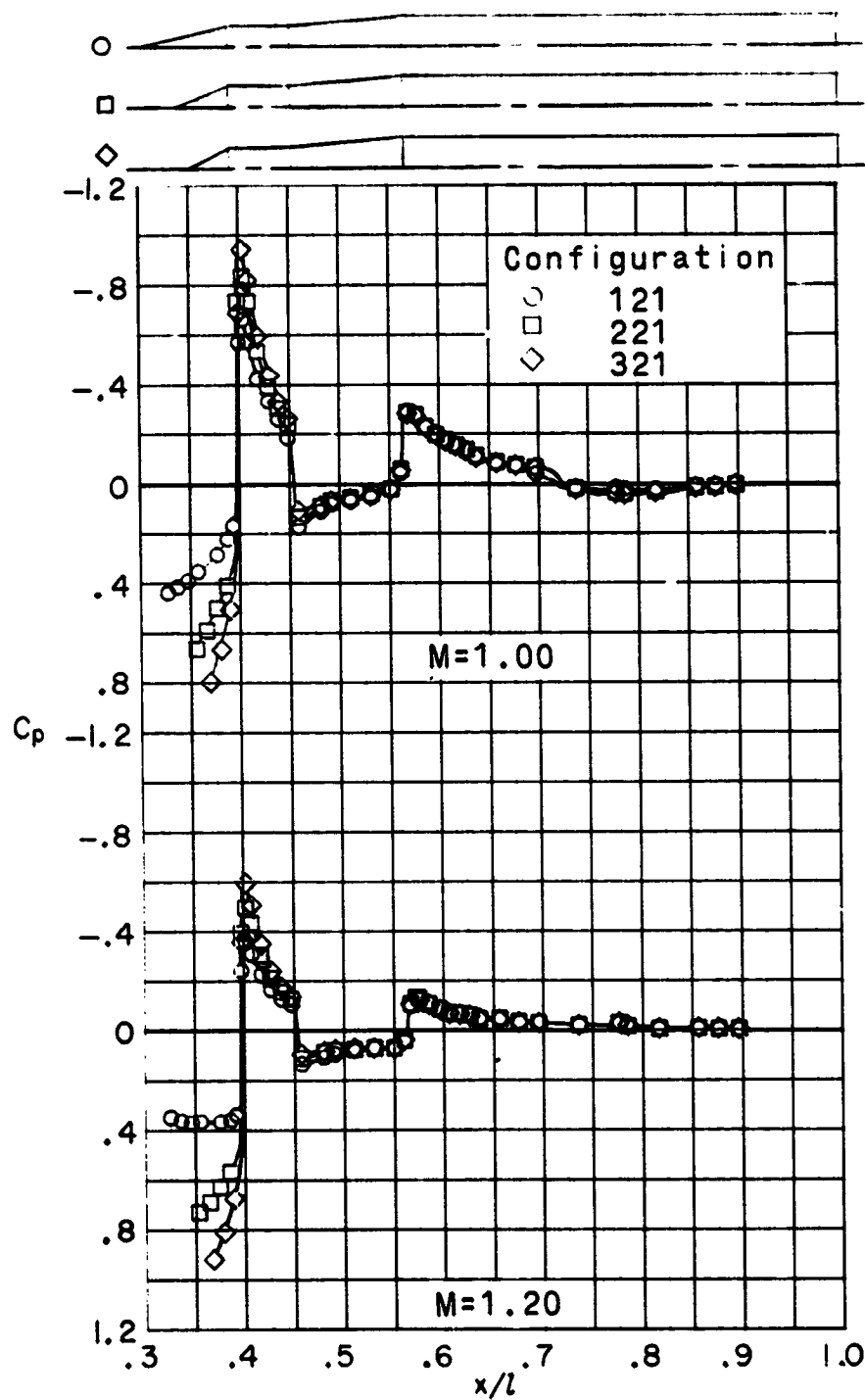
(d) Concluded.

Figure 5.- Concluded.



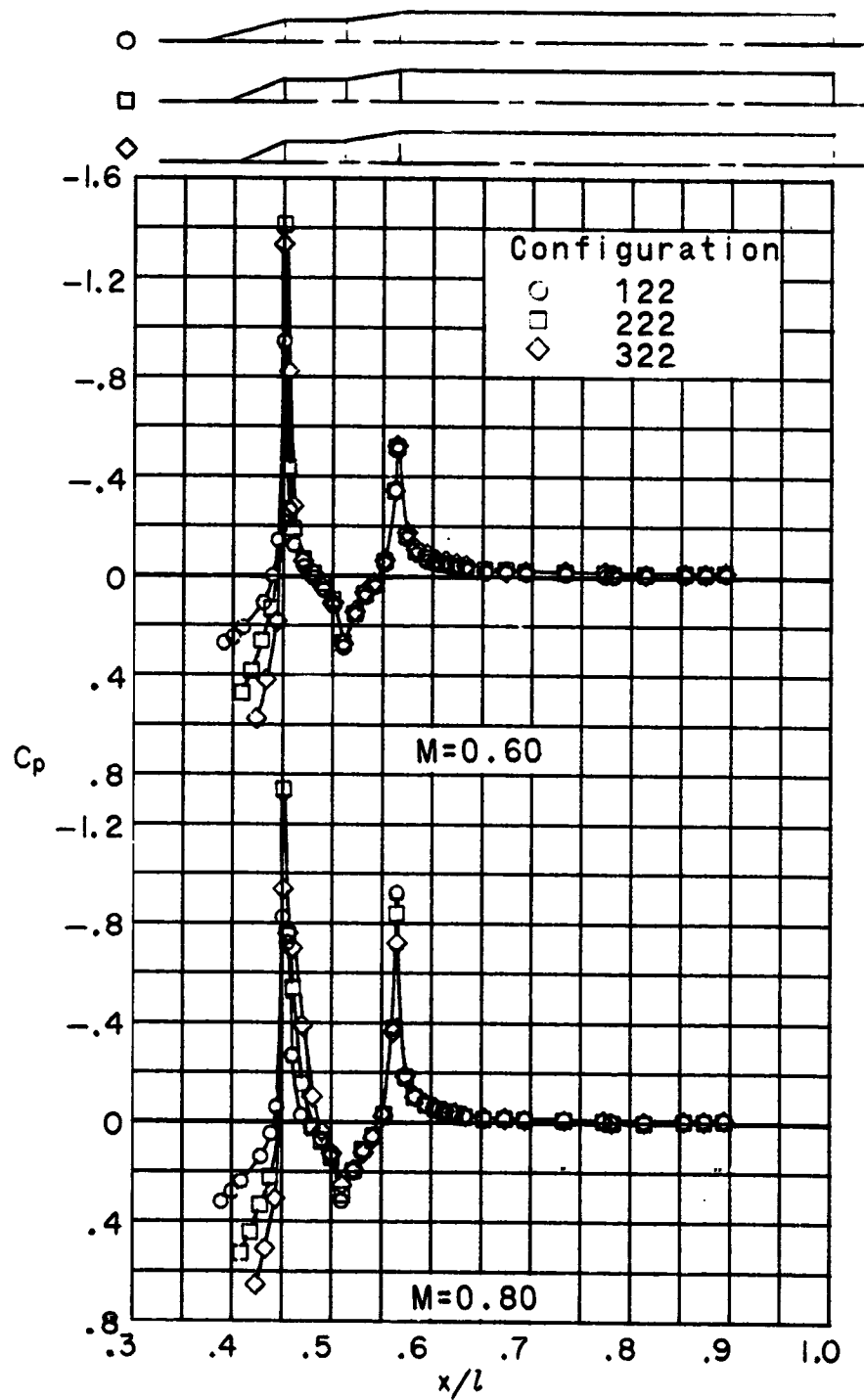
(a) $\delta_F = 5^\circ$.

Figure 6.- Effects of variation in nose-cone angle for $\phi = 0^\circ$ and $\alpha = -3^\circ$.



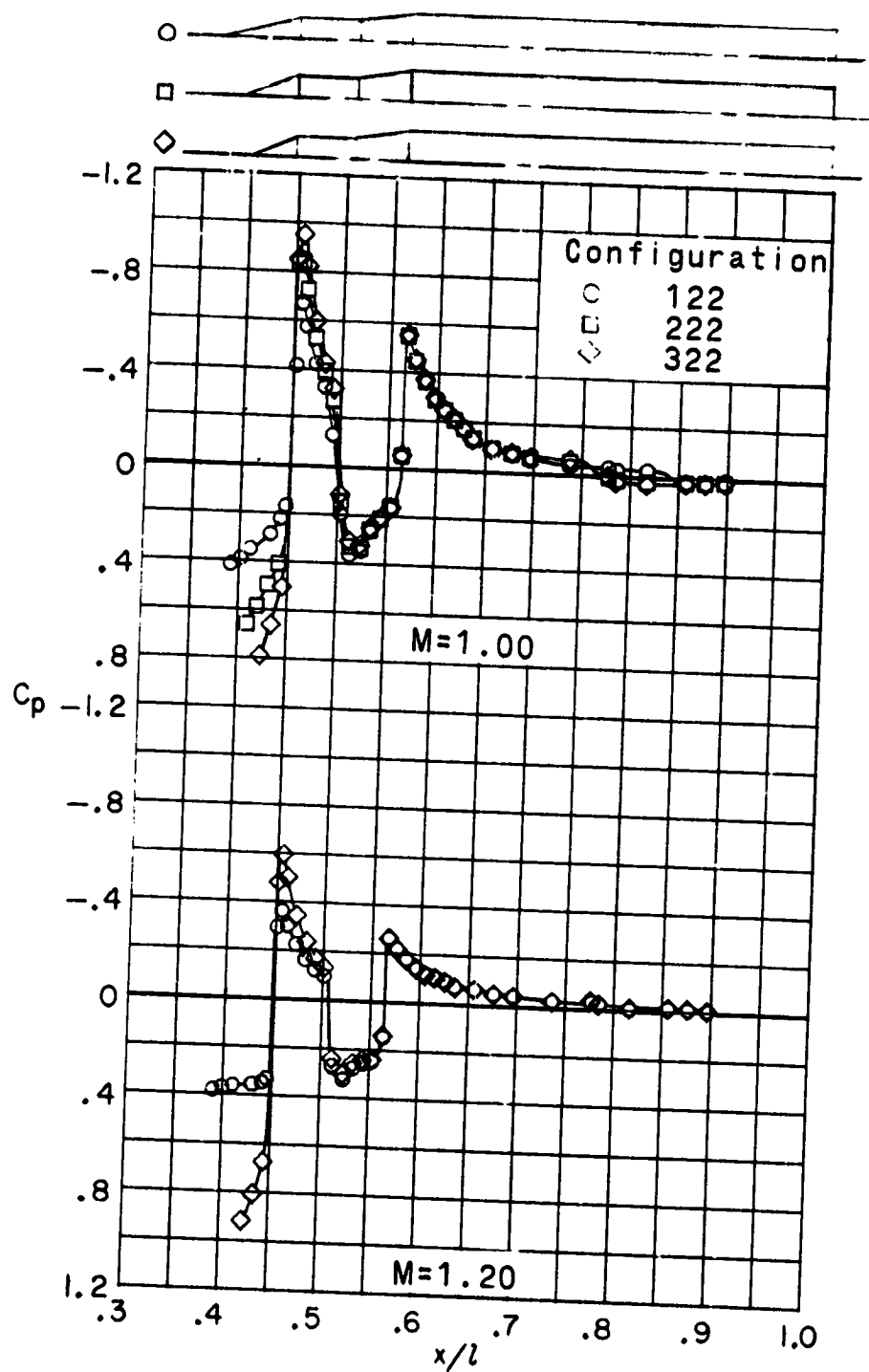
(a) Concluded.

Figure 6.- Continued.



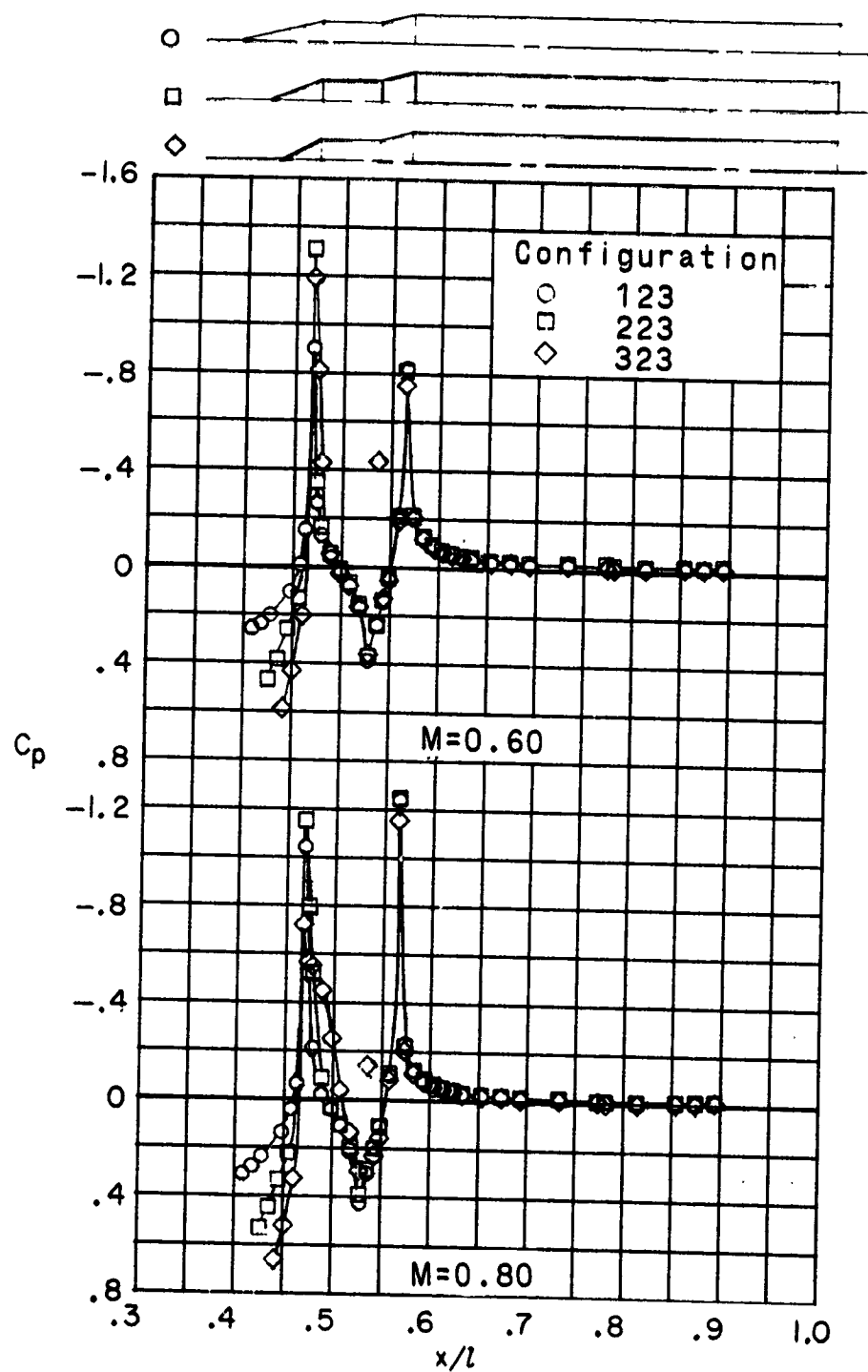
(b) $\delta_F = 10.1^\circ$.

Figure 6.- Continued.



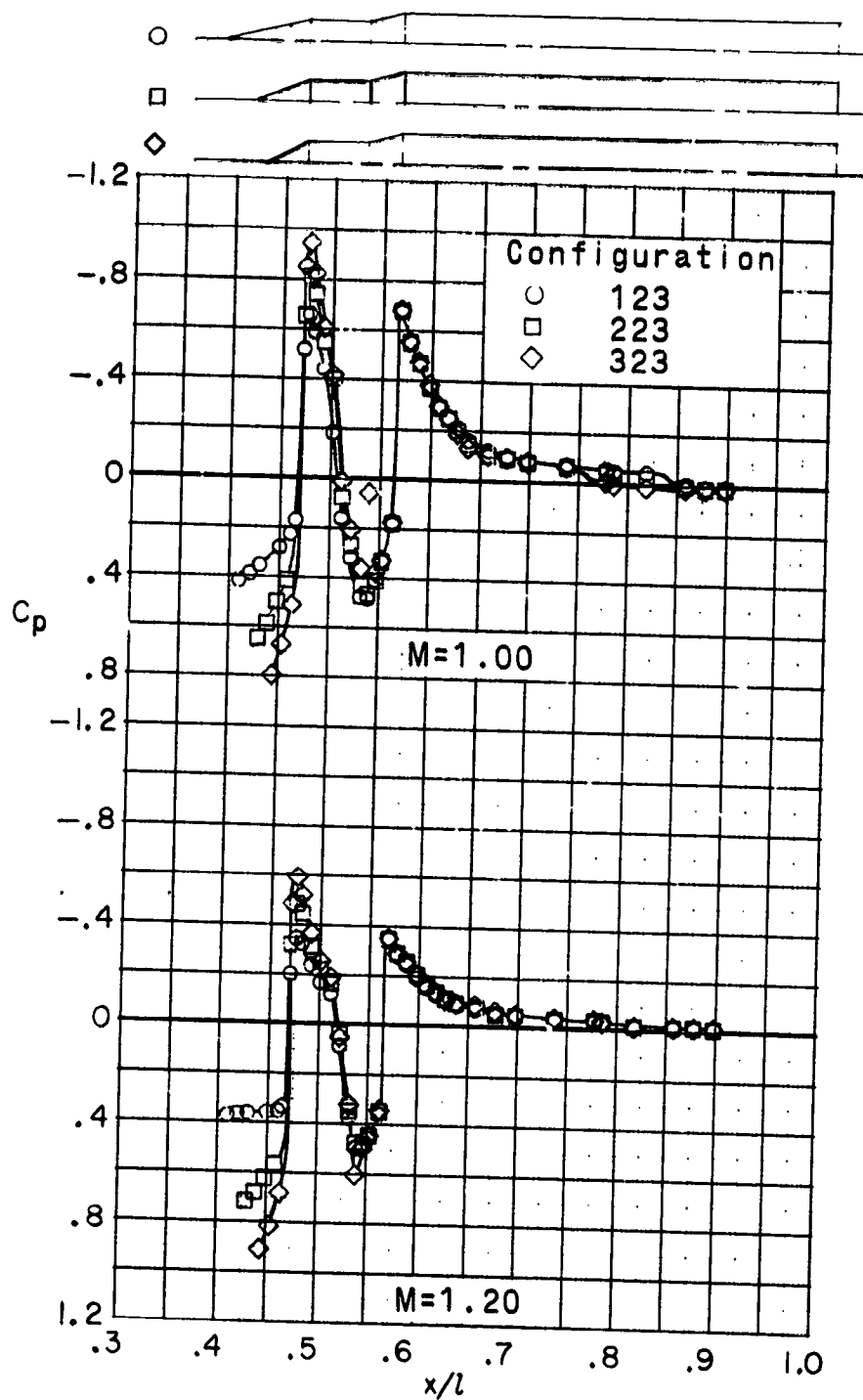
(b) Concluded.

Figure 6.- Continued.



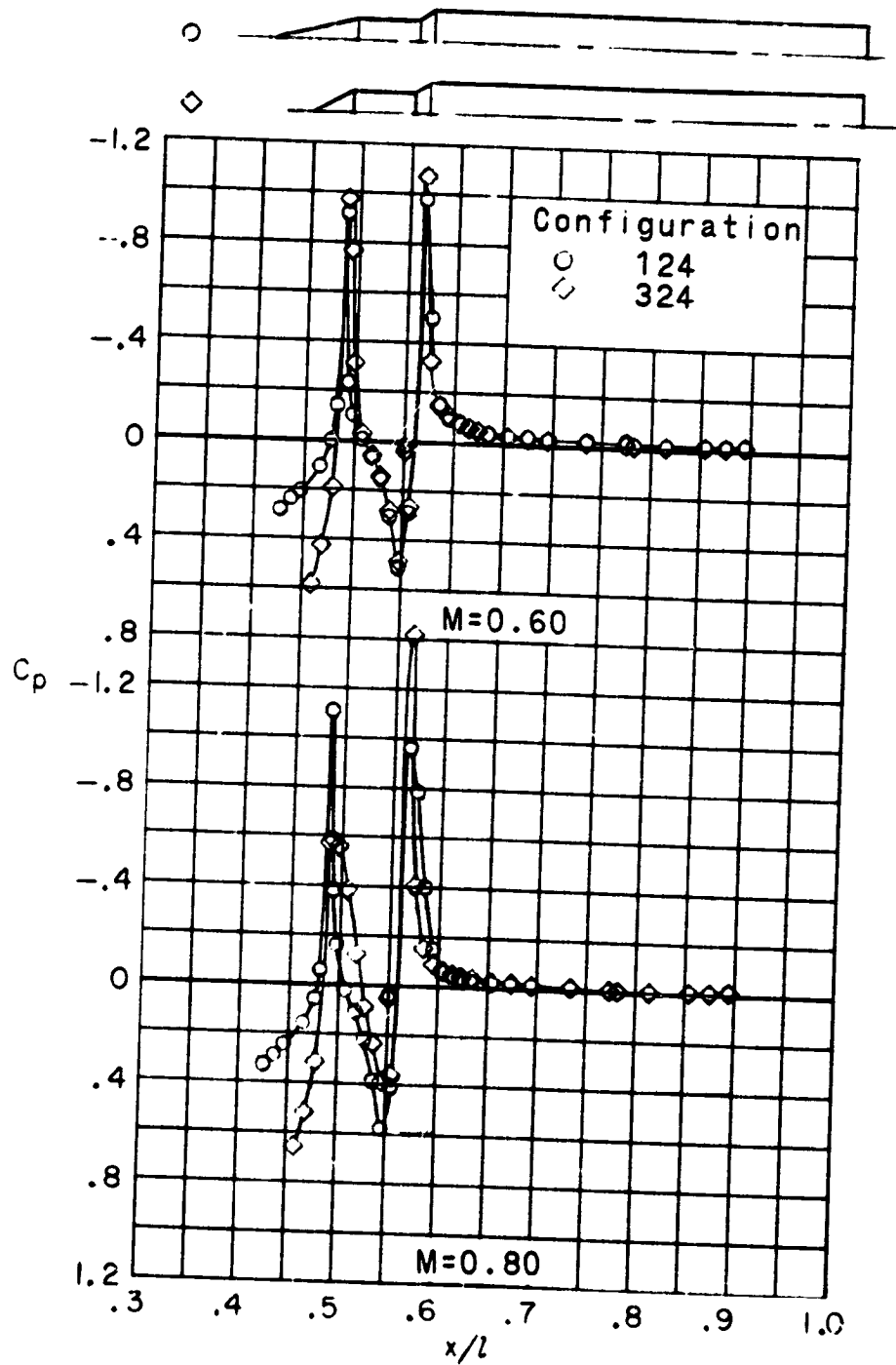
(c) $\delta_F = 15^\circ$.

Figure 6.- Continued.



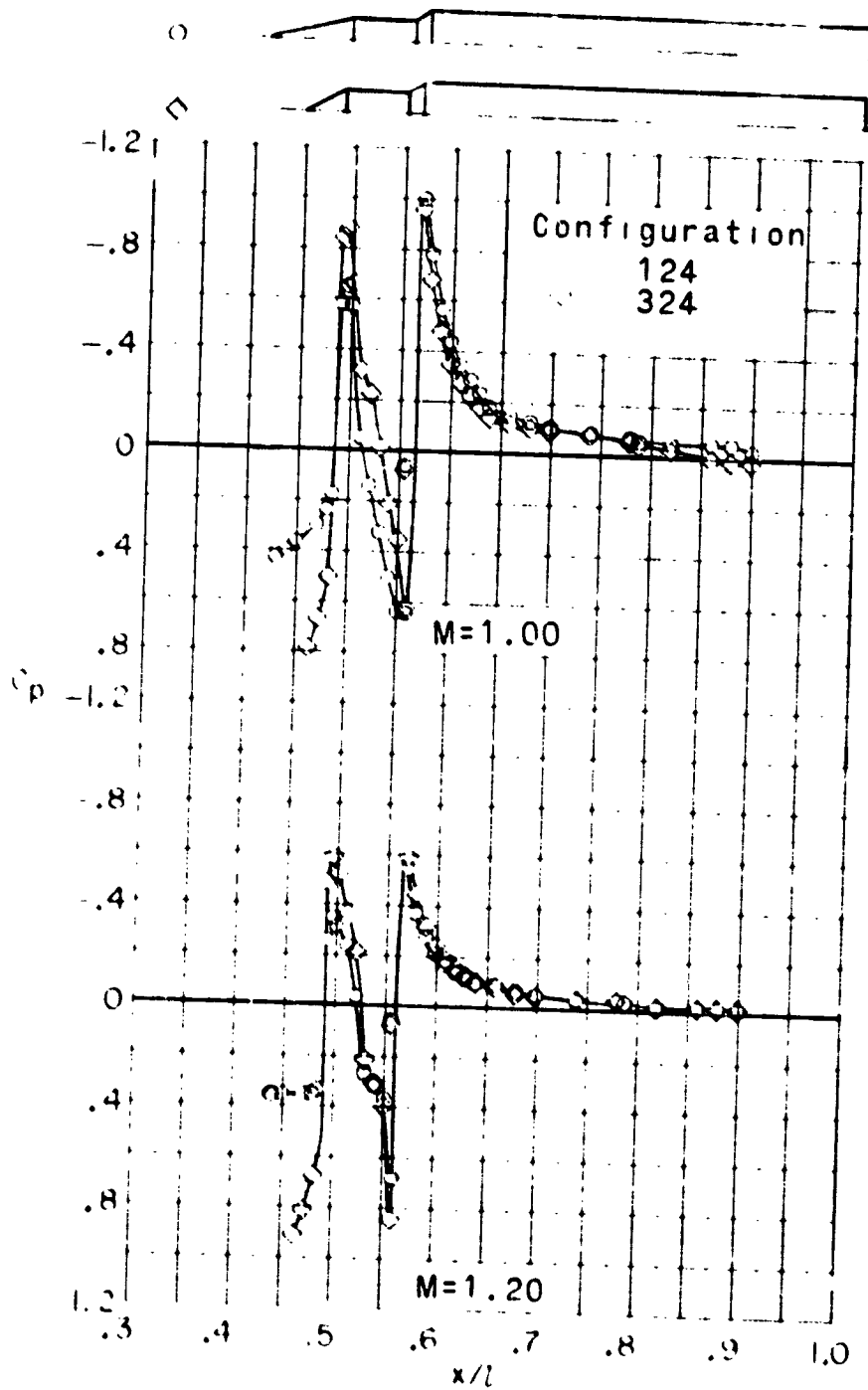
(c) Concluded.

Figure 6.- Continued.



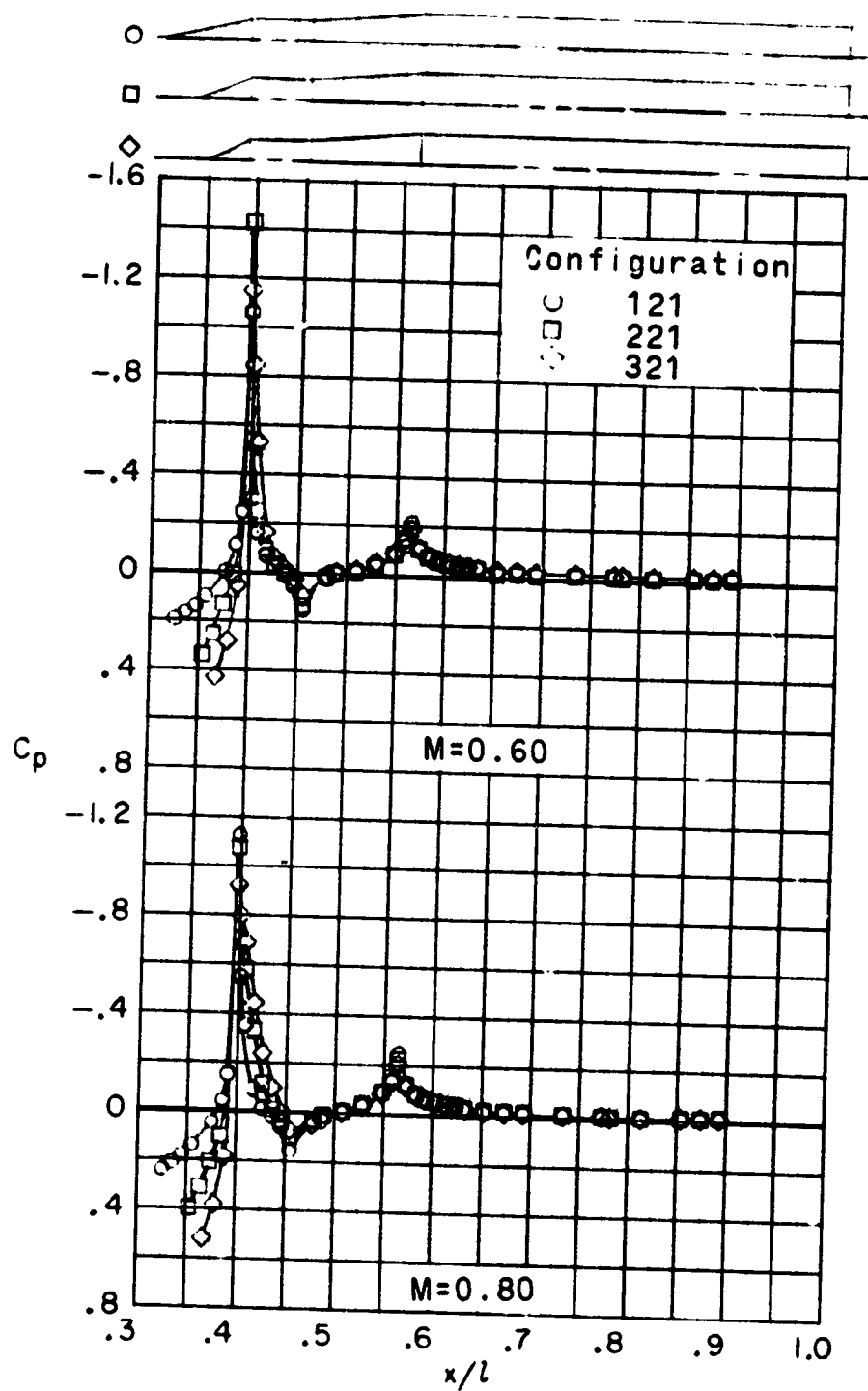
(d) $\delta_F = 30^\circ$.

Figure 6.- Continued.



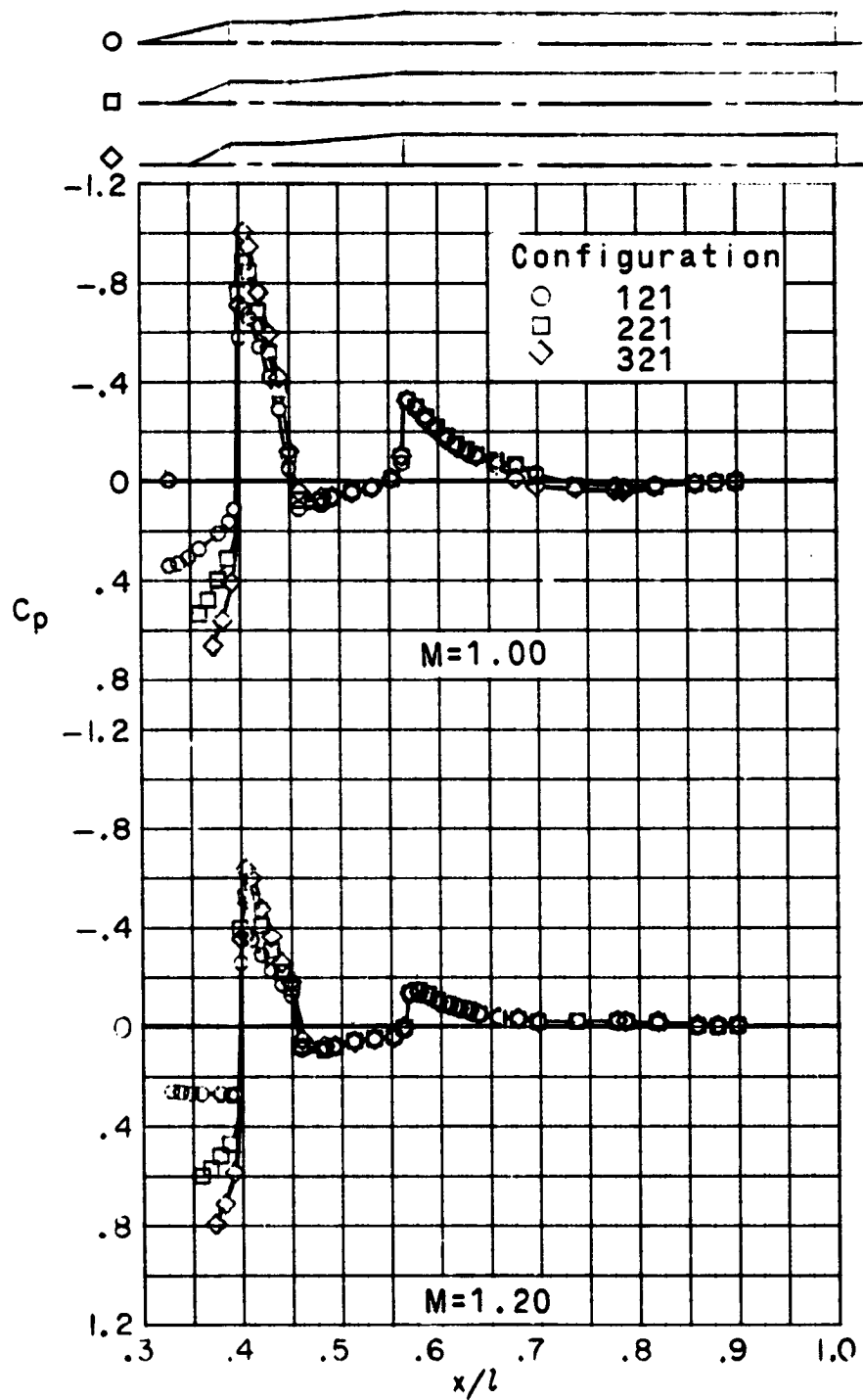
(d) Concluded.

Figure 6.- Concluded.



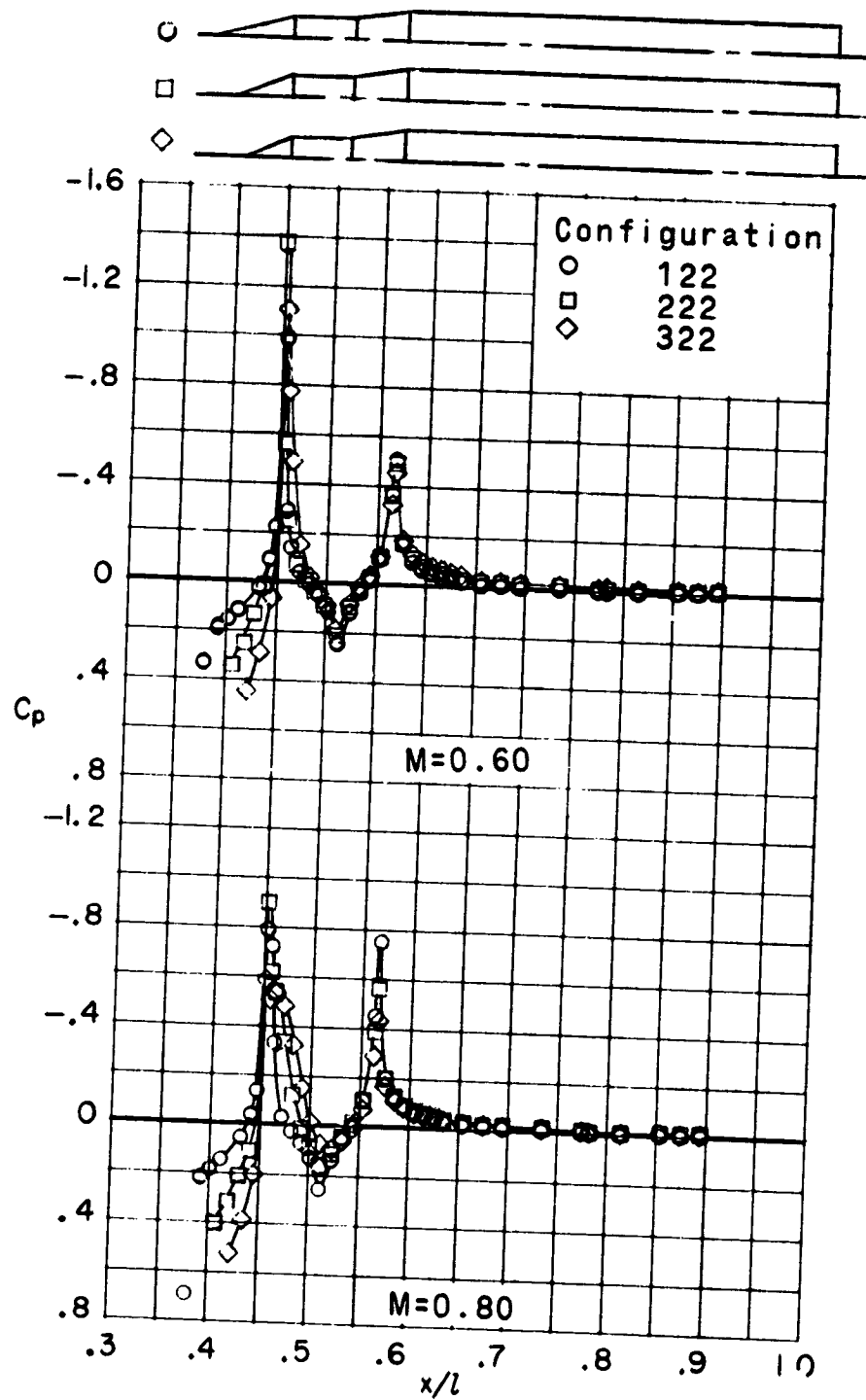
(a) $\delta_F = 5^\circ$.

Figure 7.- Effects of variation in nose-cone angle for $\phi = 0^\circ$ and $\alpha = 3^\circ$.



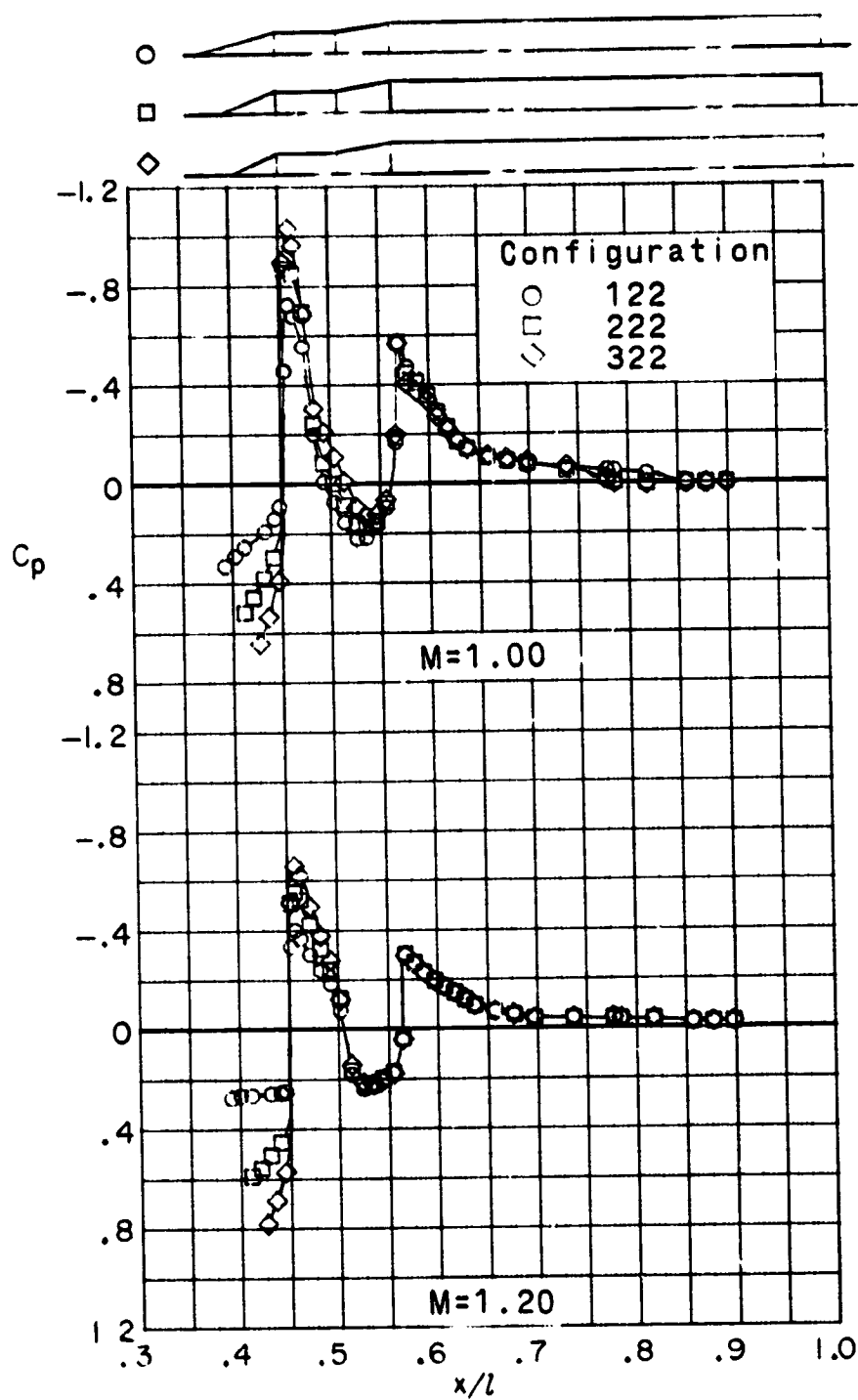
(a) Concluded.

Figure 7.- Continued.



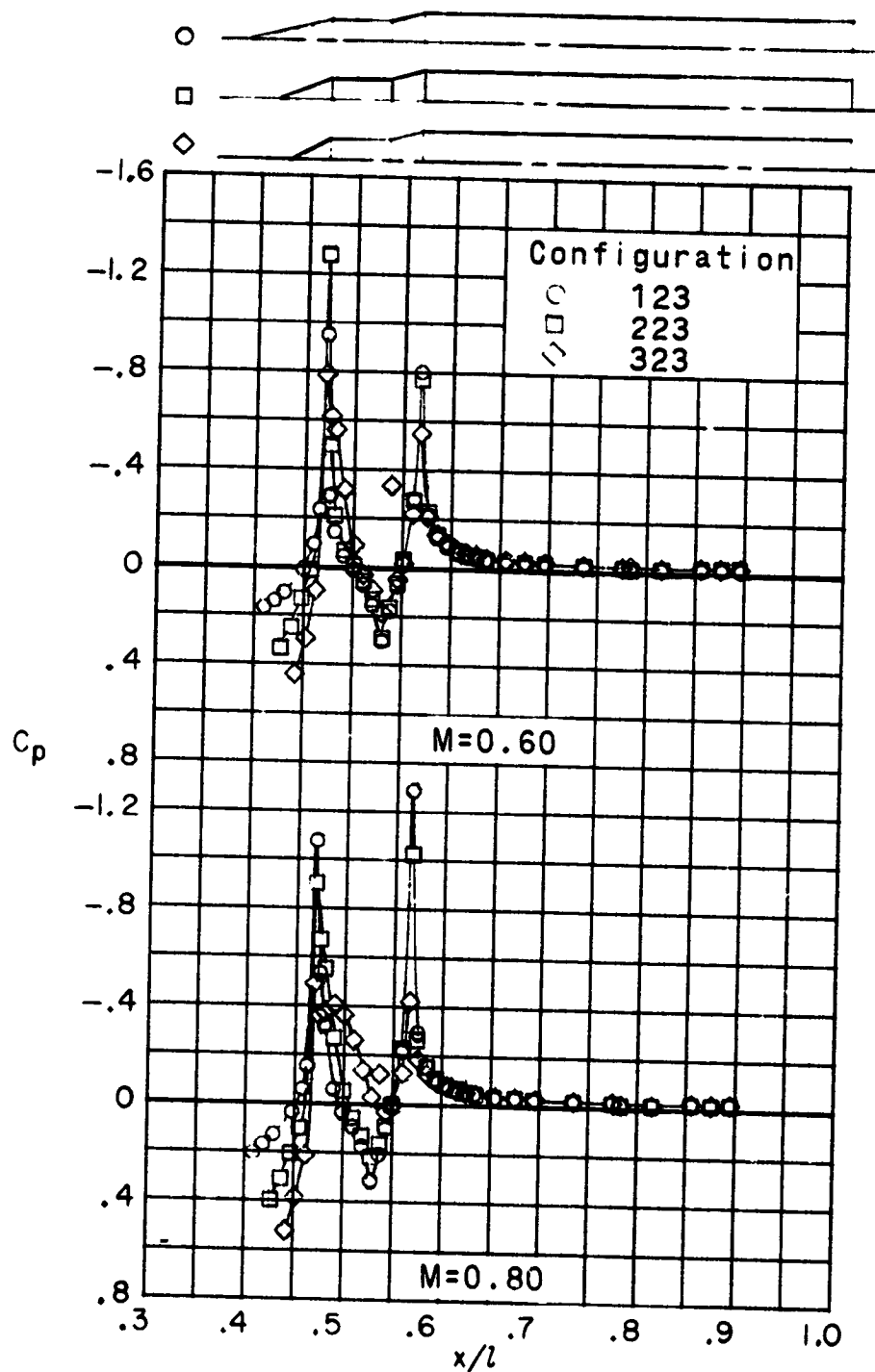
(b) $\delta_F = 10.1^\circ$.

Figure 7.- Continued.



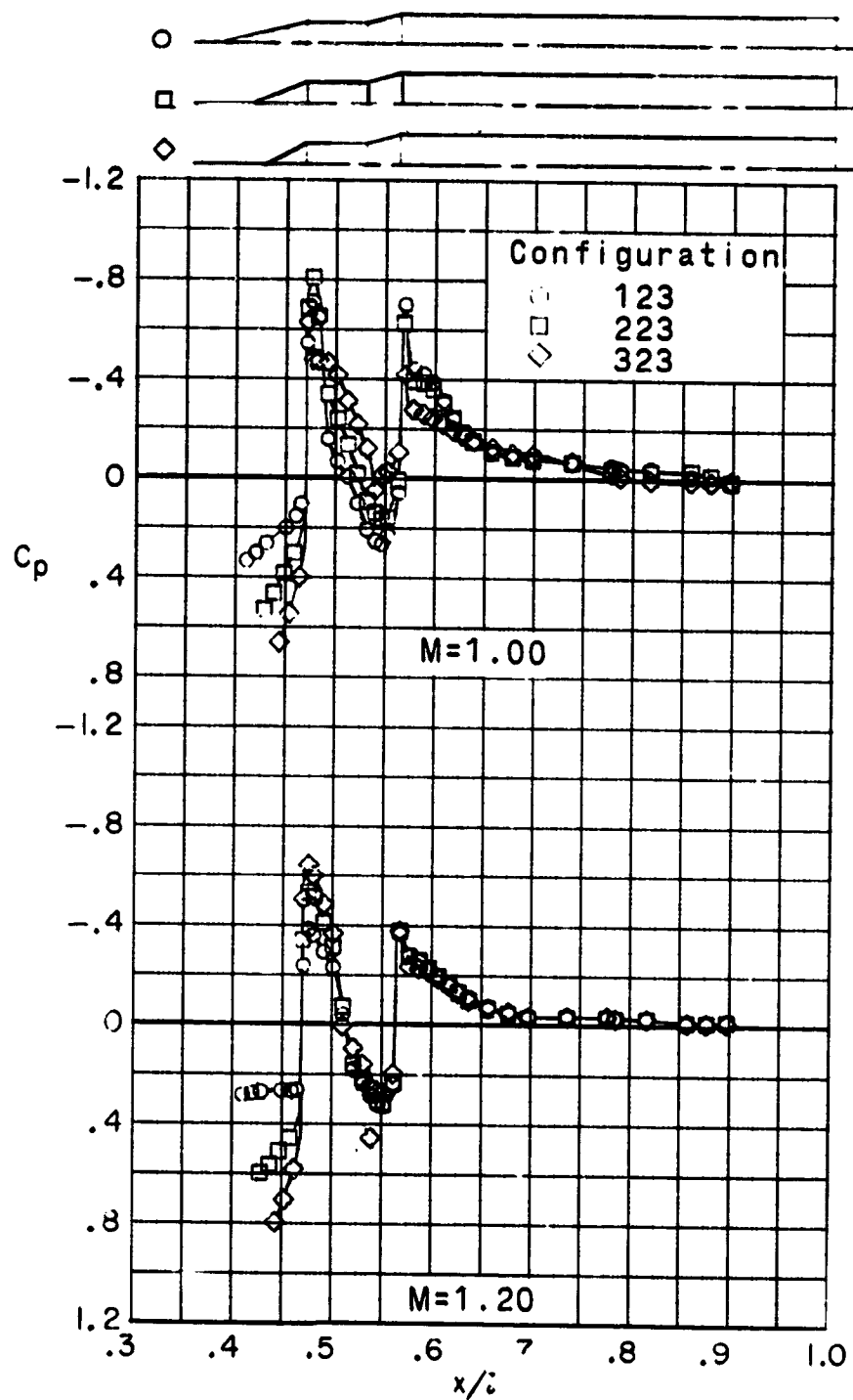
(b) Concluded.

Figure 7.- Continued.



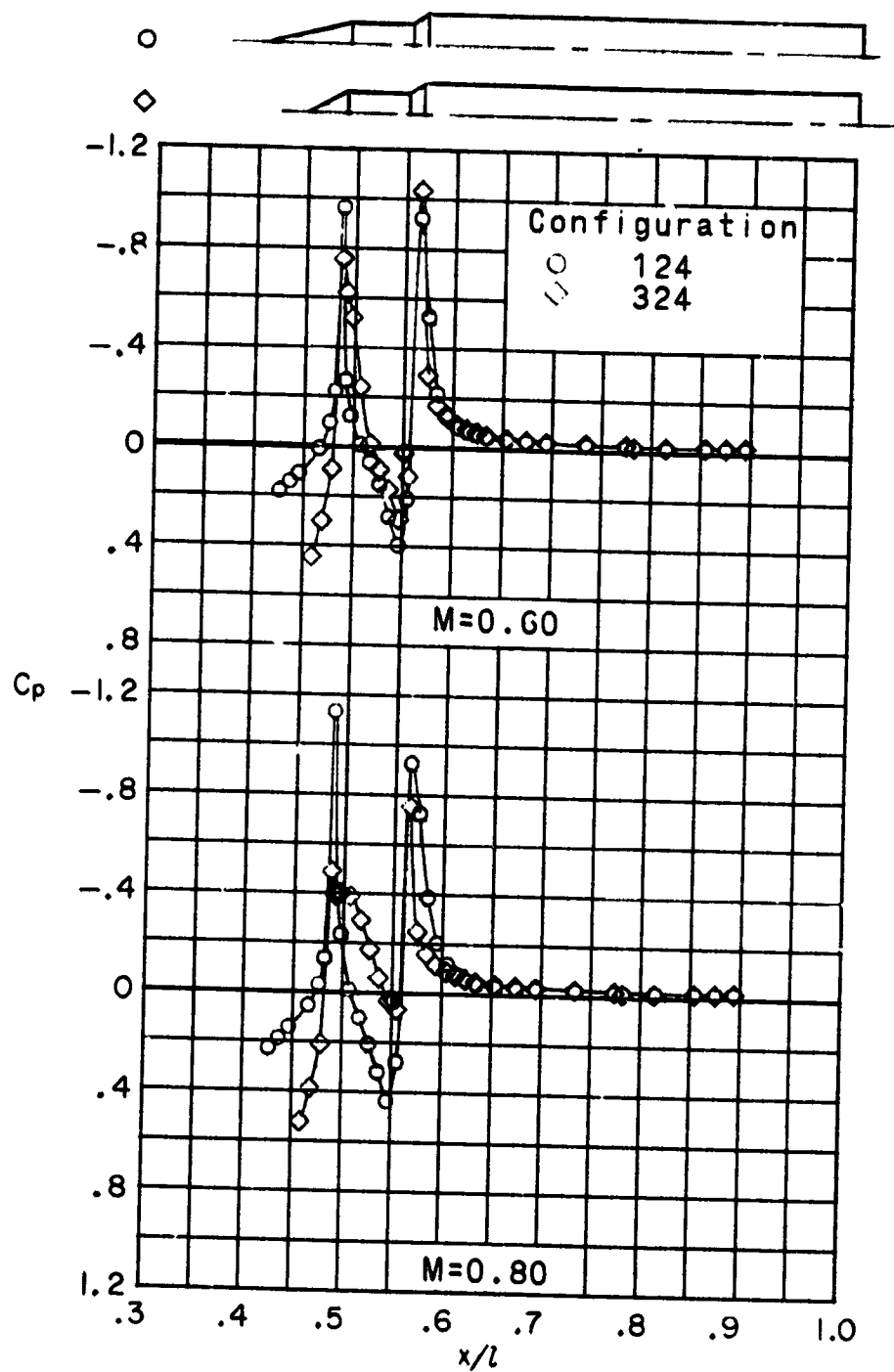
(c) $\delta_F = 15^\circ$.

Figure 7.- Continued.



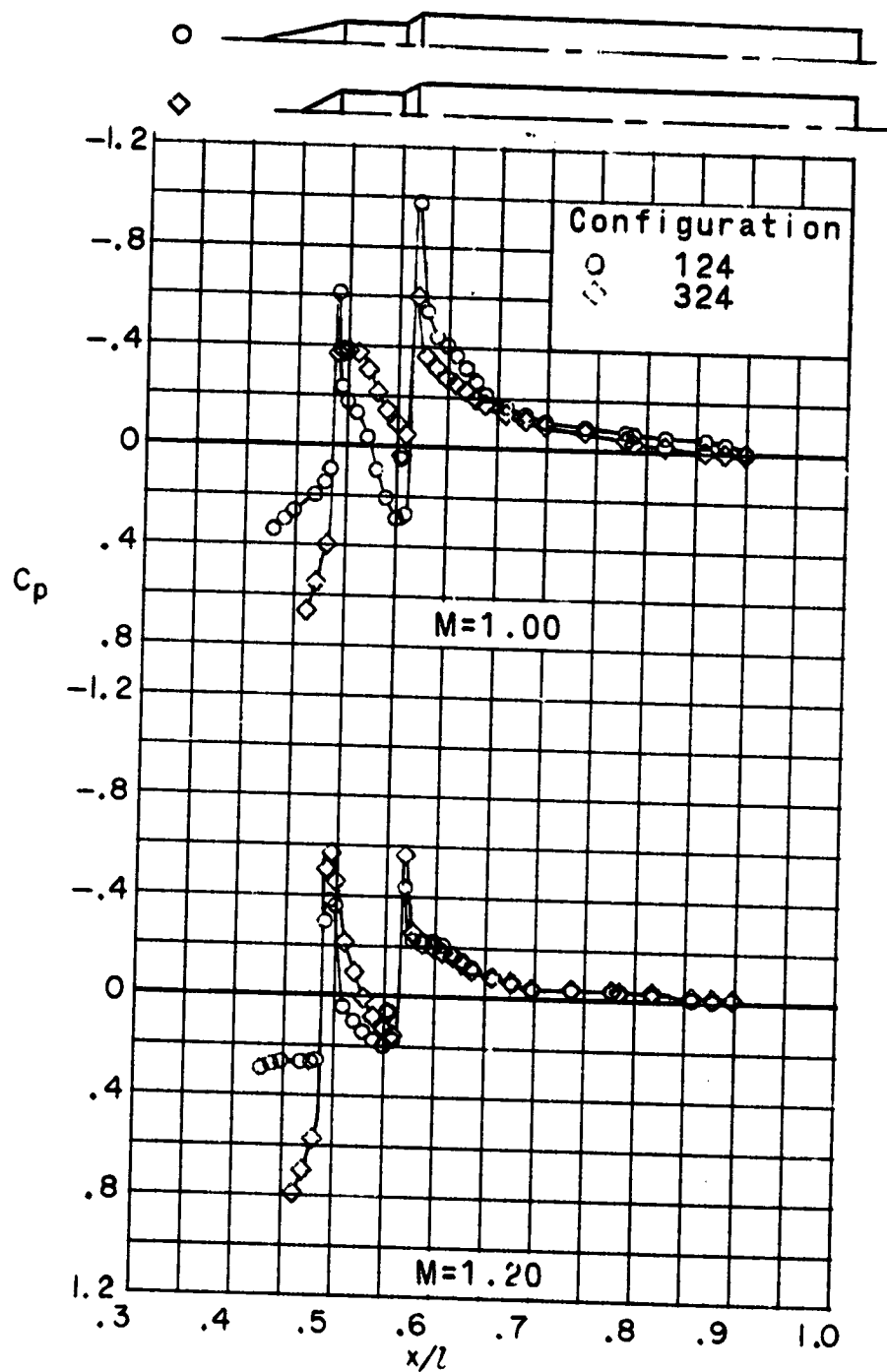
(c) Concluded.

Figure 7.- Continued.



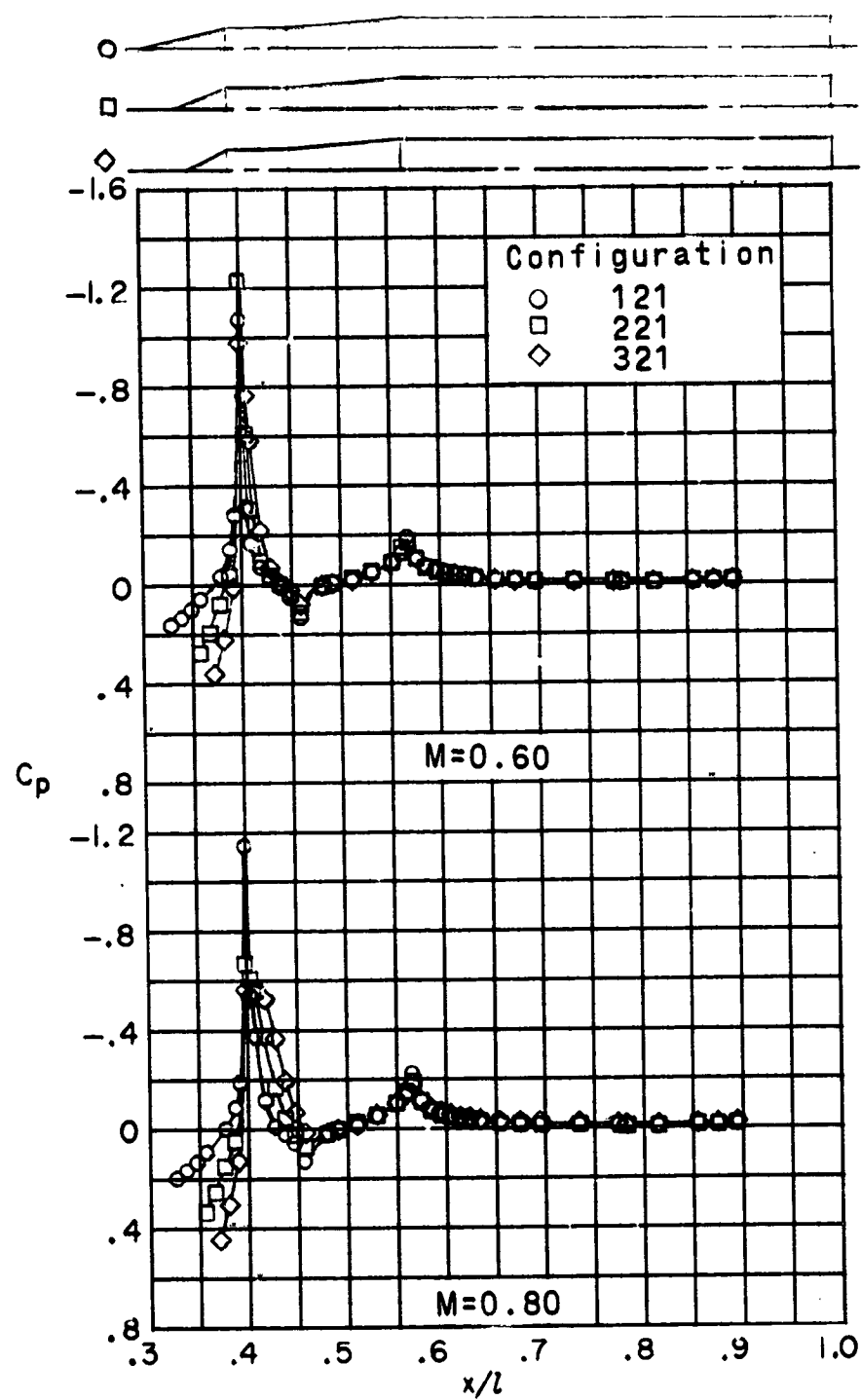
(d) $\delta_F = 30^\circ$.

Figure 7.- Continued.



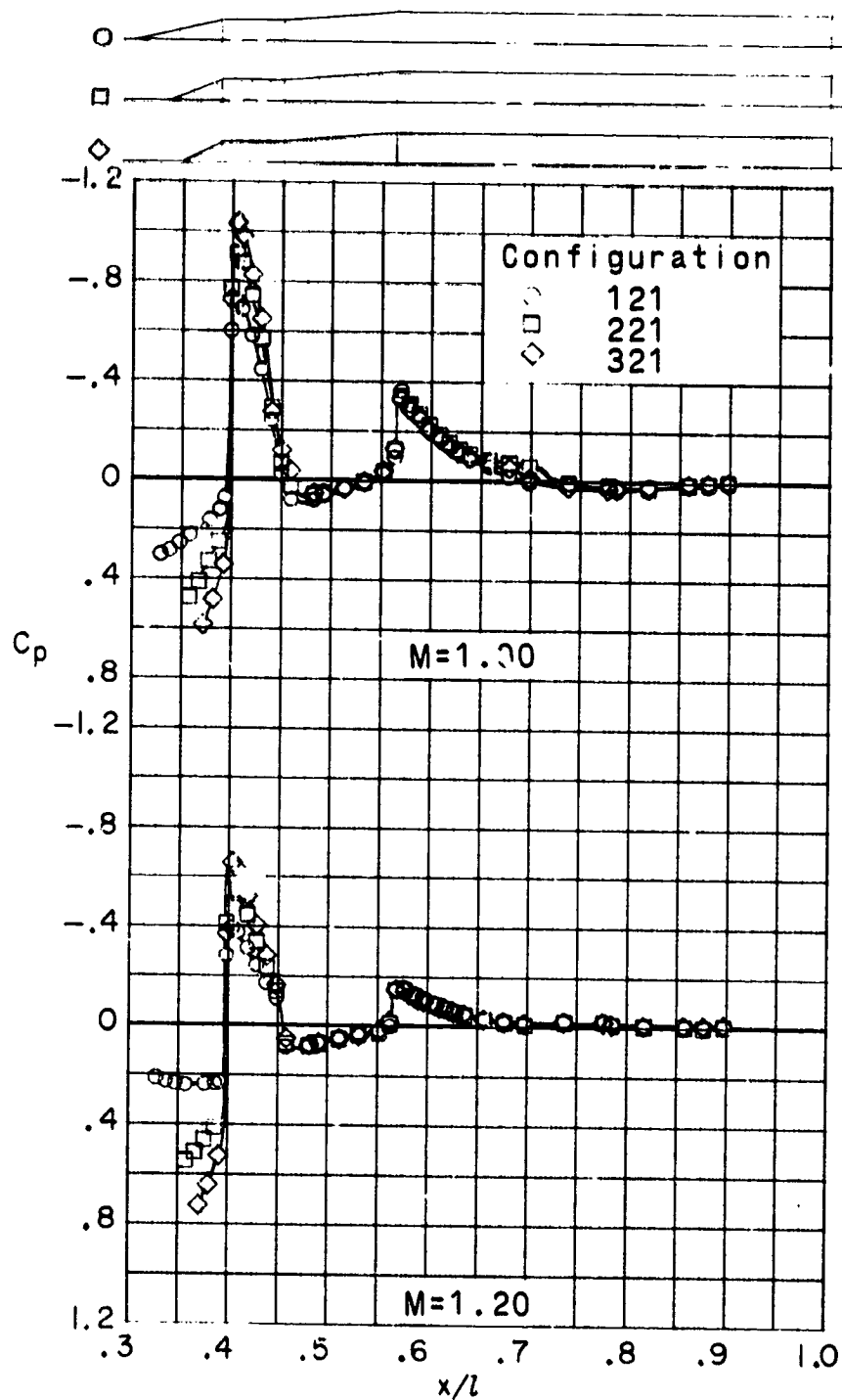
(d) Concluded.

Figure 7.- Concluded.



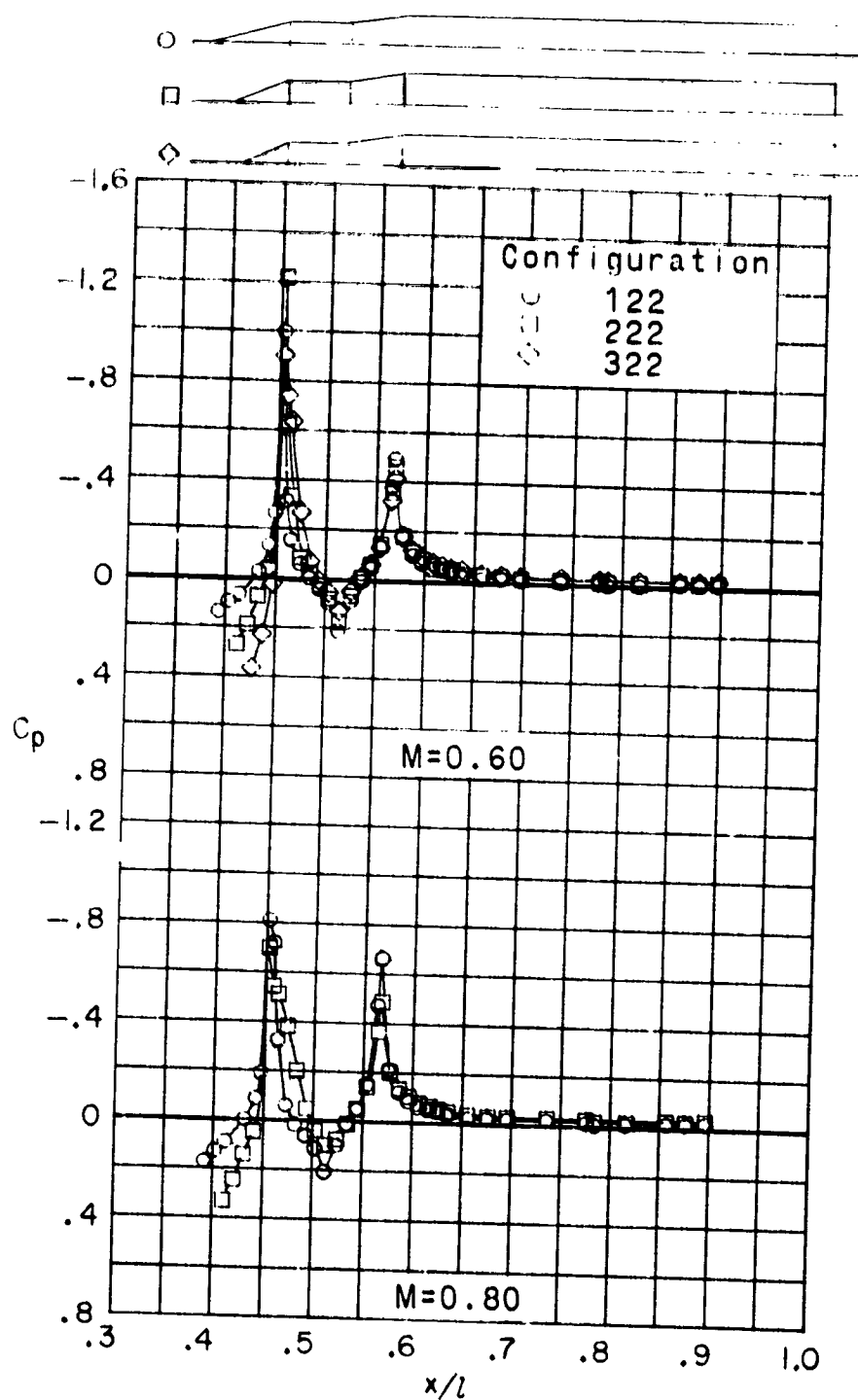
(a) $\delta_F = 5^\circ$.

Figure 8.- Effects of variation in nose-cone angle for $\phi = 0^\circ$ and $\alpha = 6^\circ$.



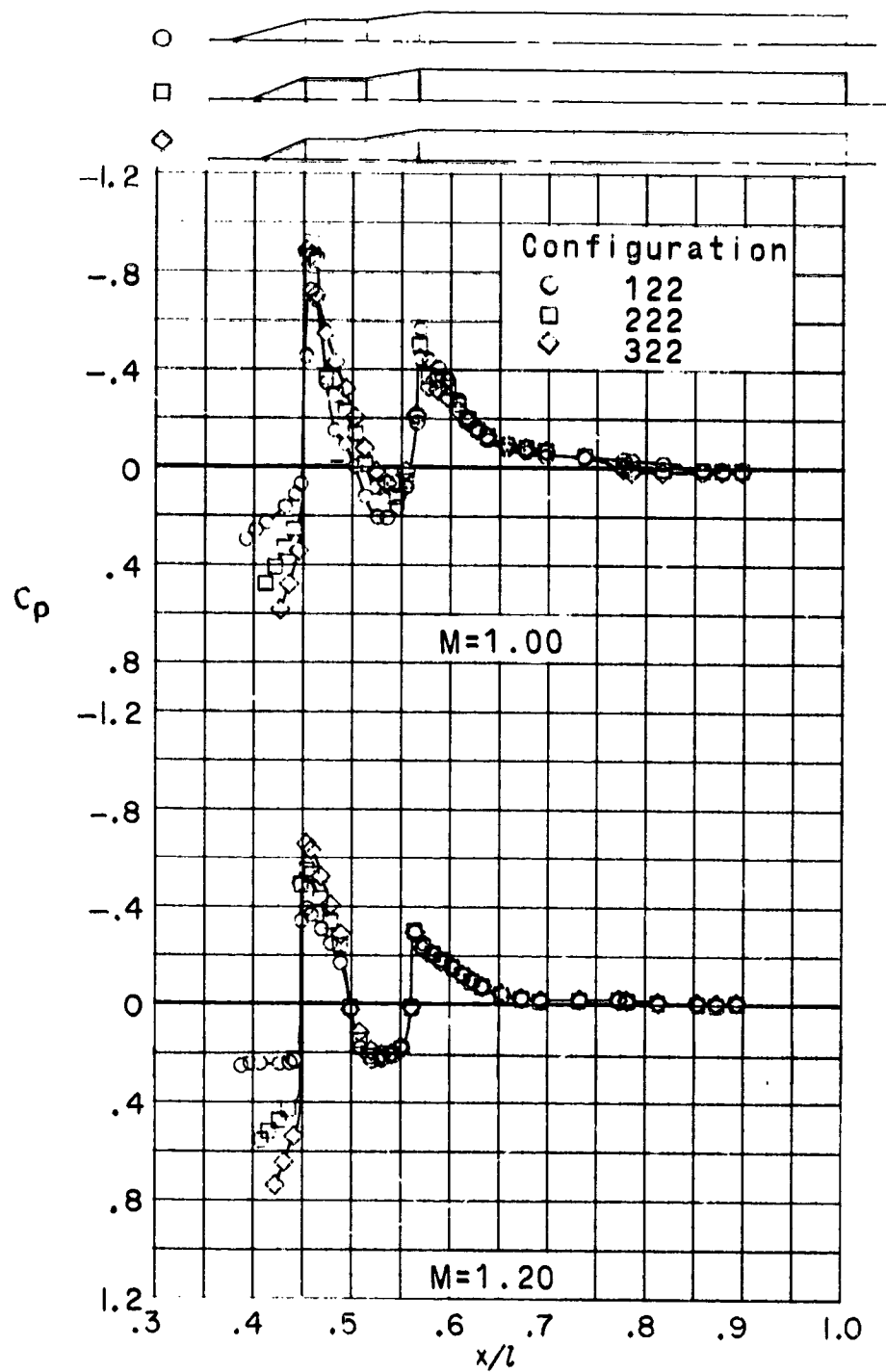
(a) Concluded.

Figure 8.- Continued.



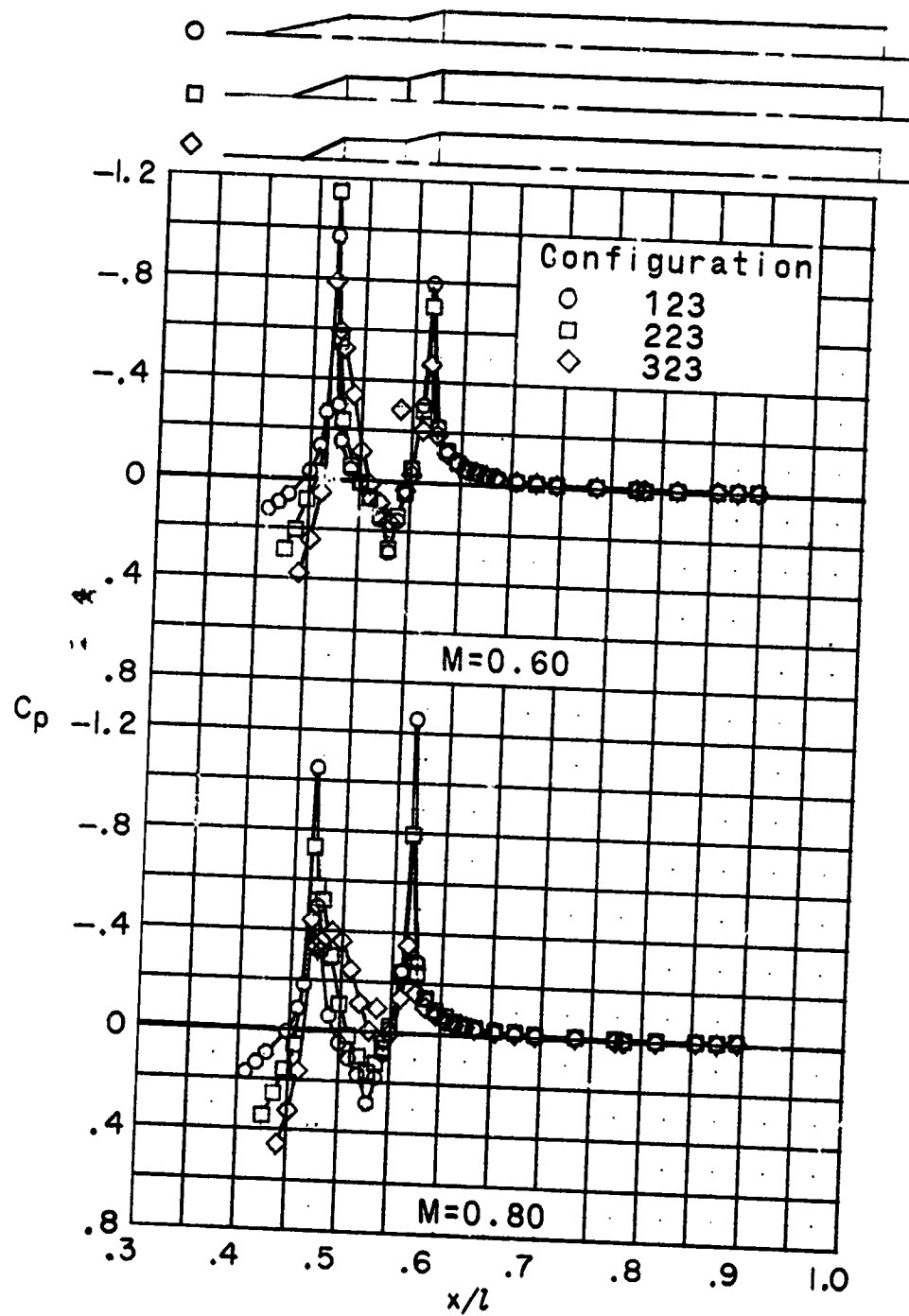
(b) $\delta_F = 10.1^\circ$.

Figure 8.- Continued.



(b) Concluded.

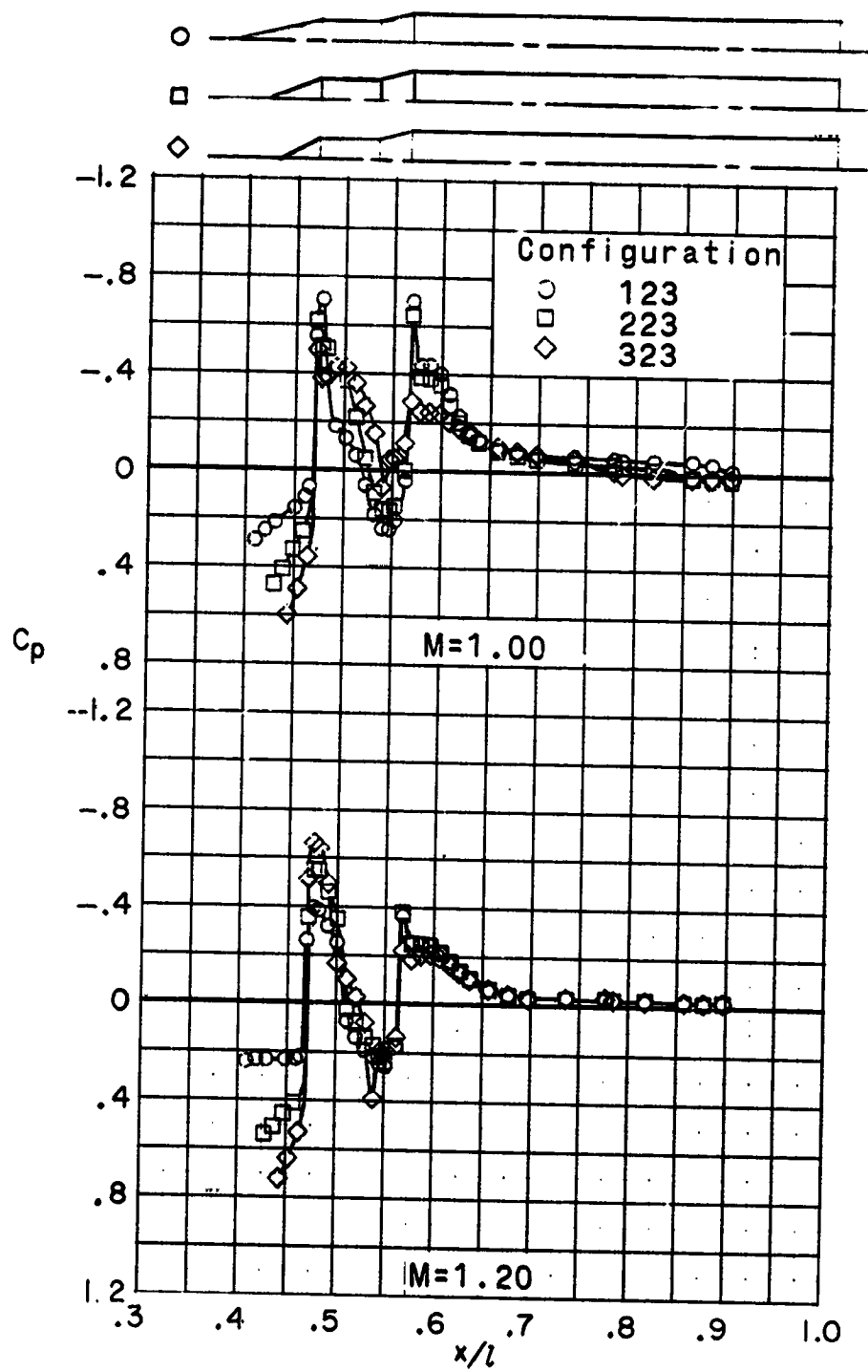
Figure 8.- Continued.



(c) $\delta_F = 15^\circ$.

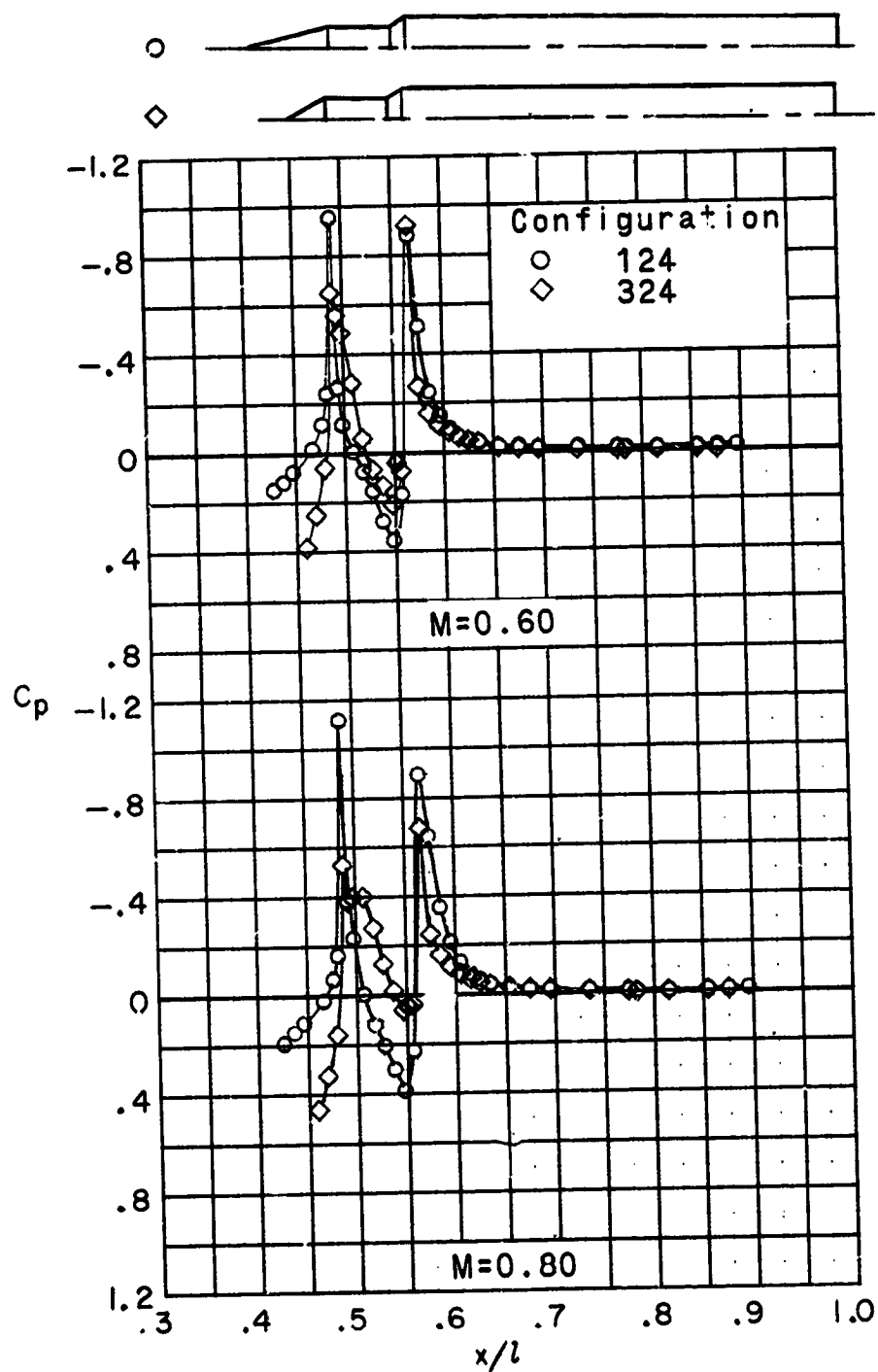
Figure 8.- Continued.

C-3



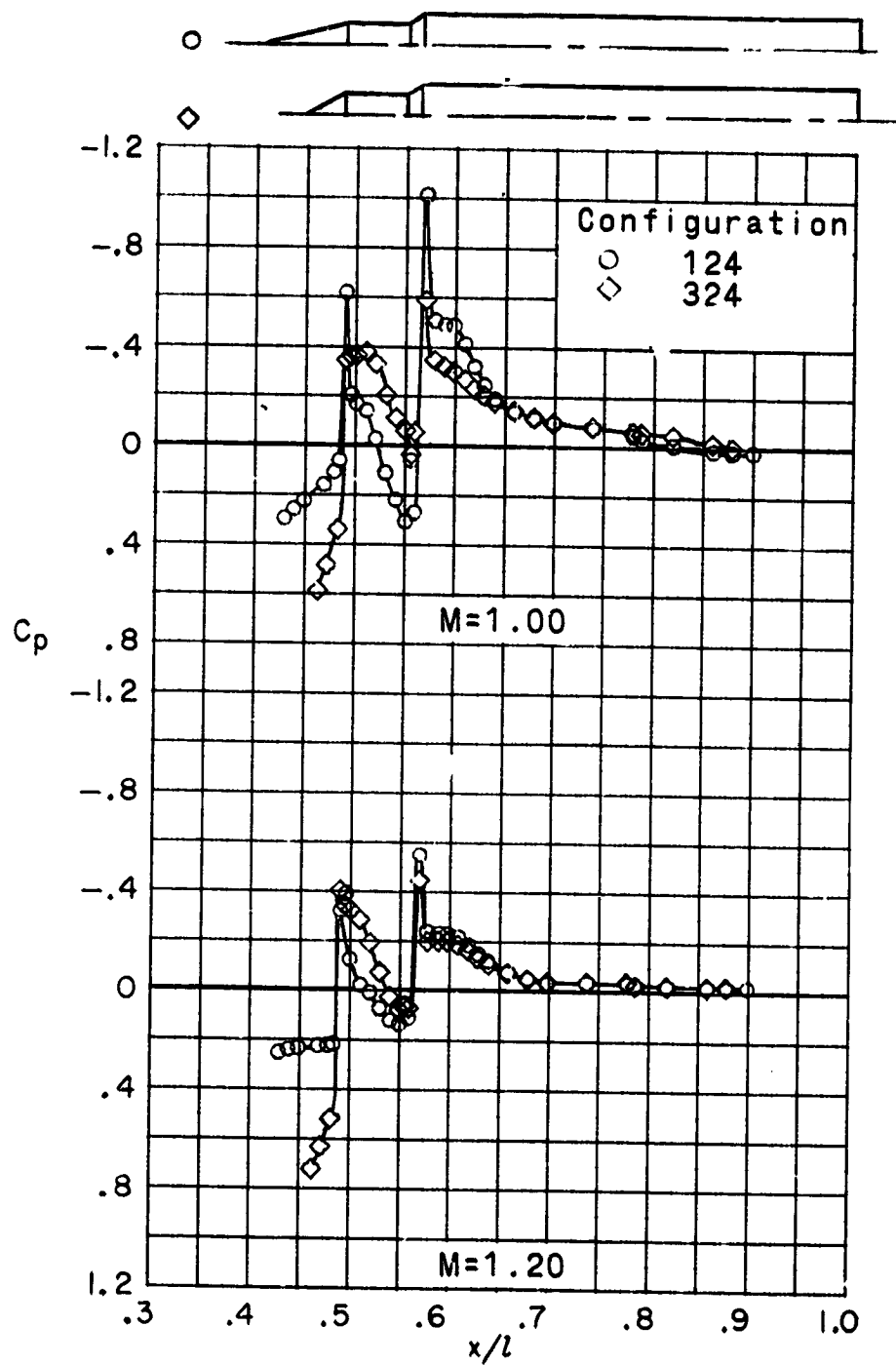
(c) Concluded.

Figure 8.- Continued.



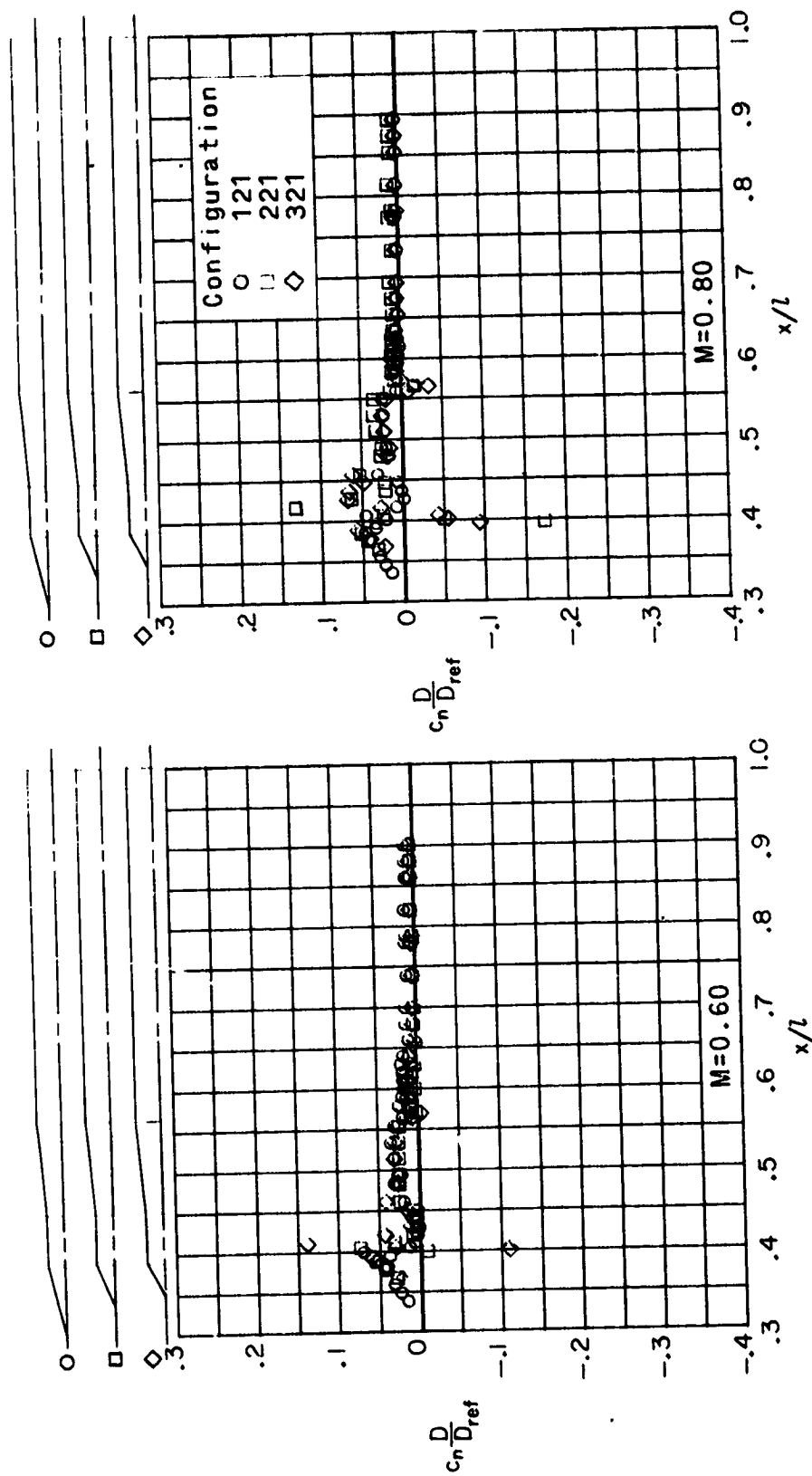
(d) $\delta_F = 30^\circ$.

Figure 8.- Continued.



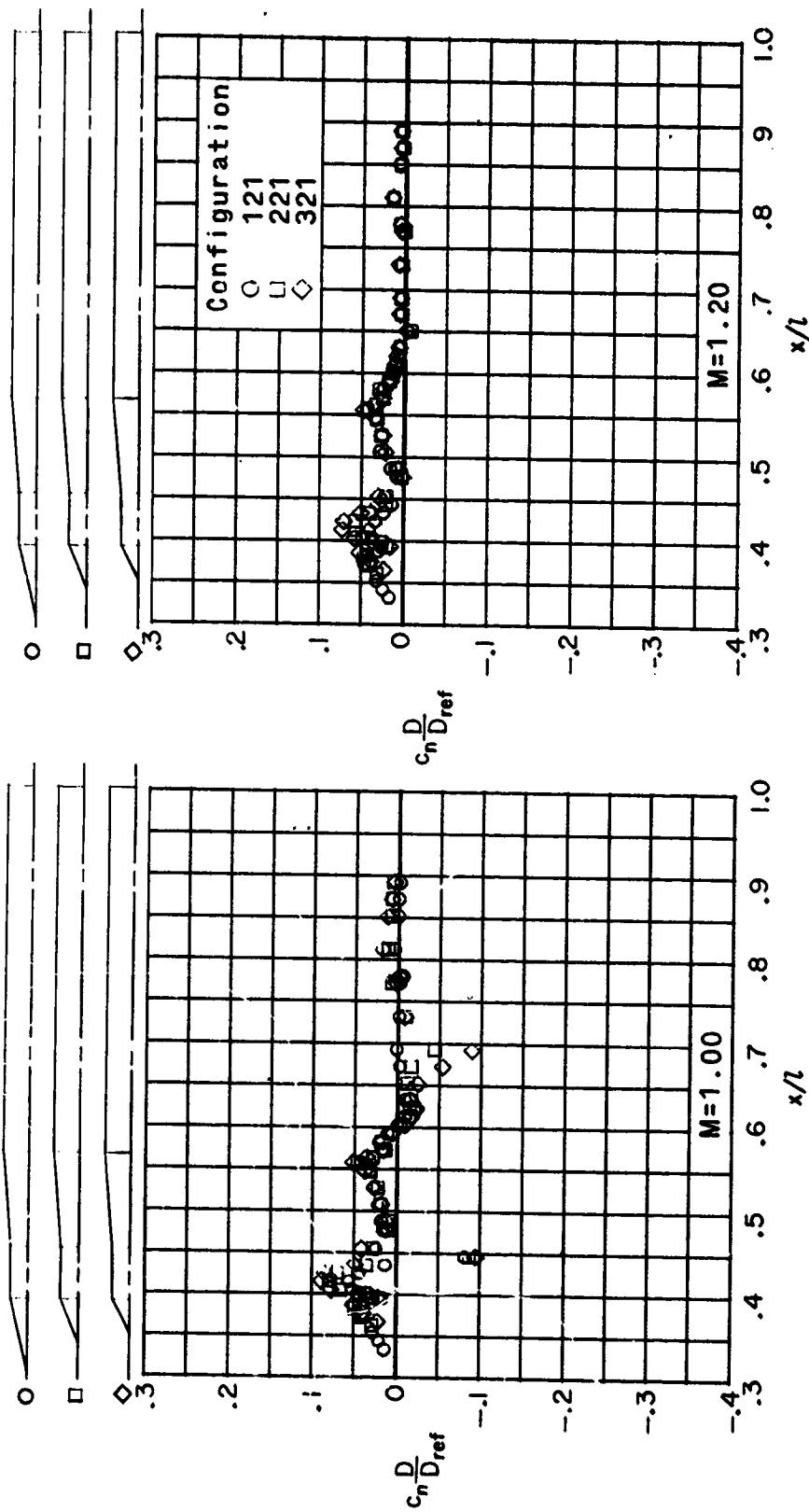
(d) Concluded.

Figure 8.- Concluded.



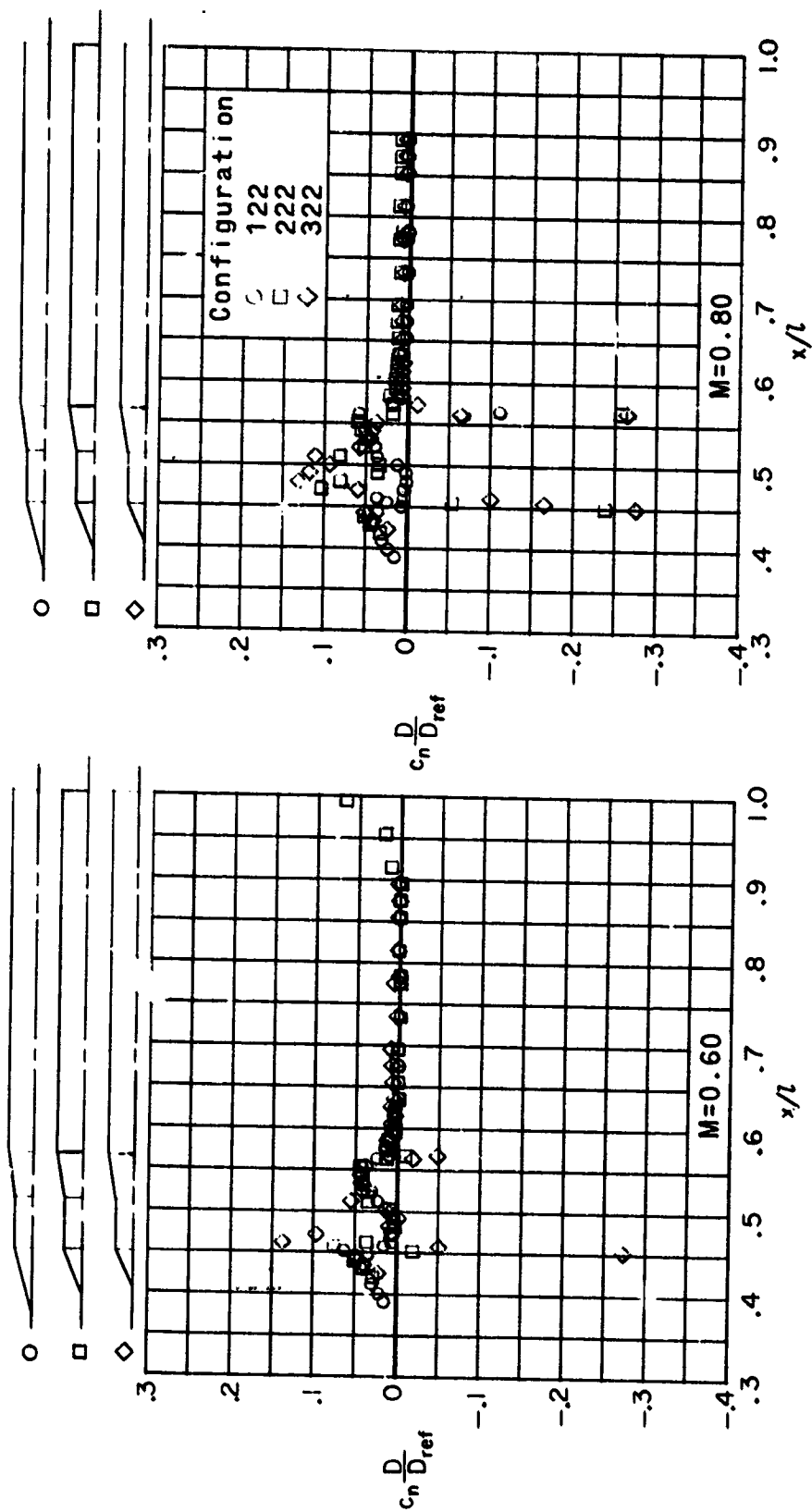
(a) $\delta p = 5^\circ$.

Figure 9.- Effect of variation in nose-cone angle on load distributions at $\alpha = 30^\circ$.



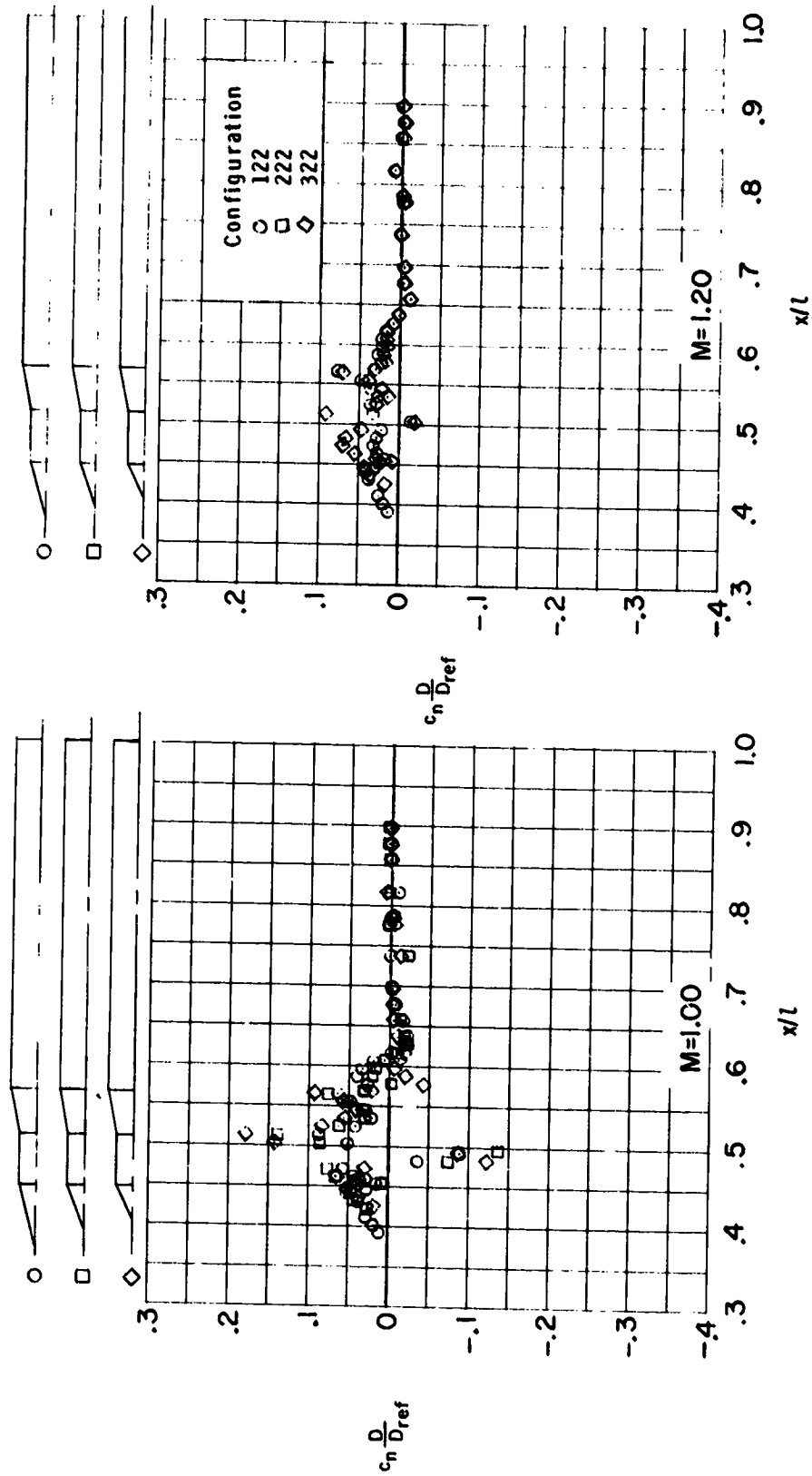
(a) Concluded.

Figure 9.- Continued.



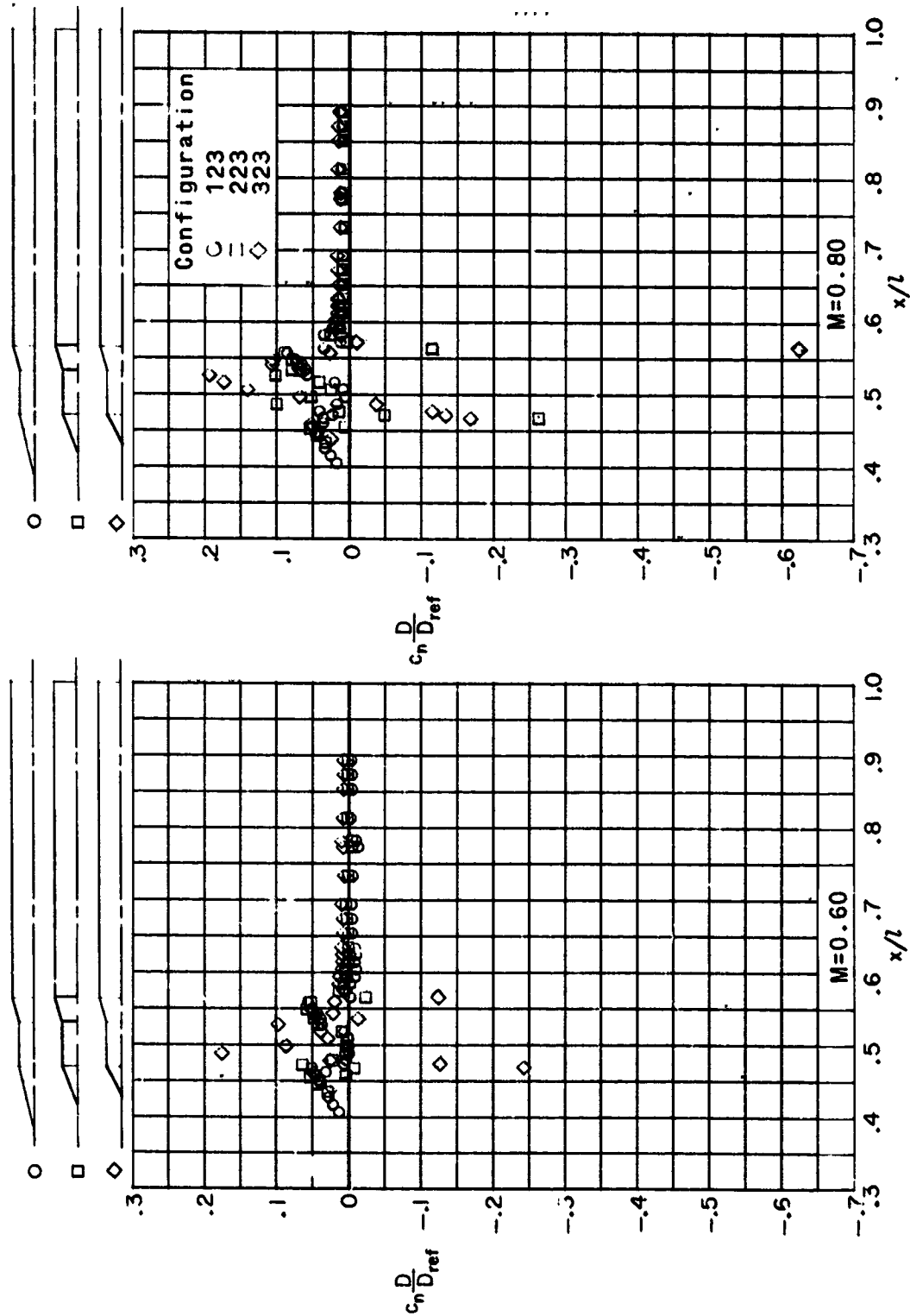
(b) $\delta_P = 10.1^\circ$.

Figure 9.- Continued.



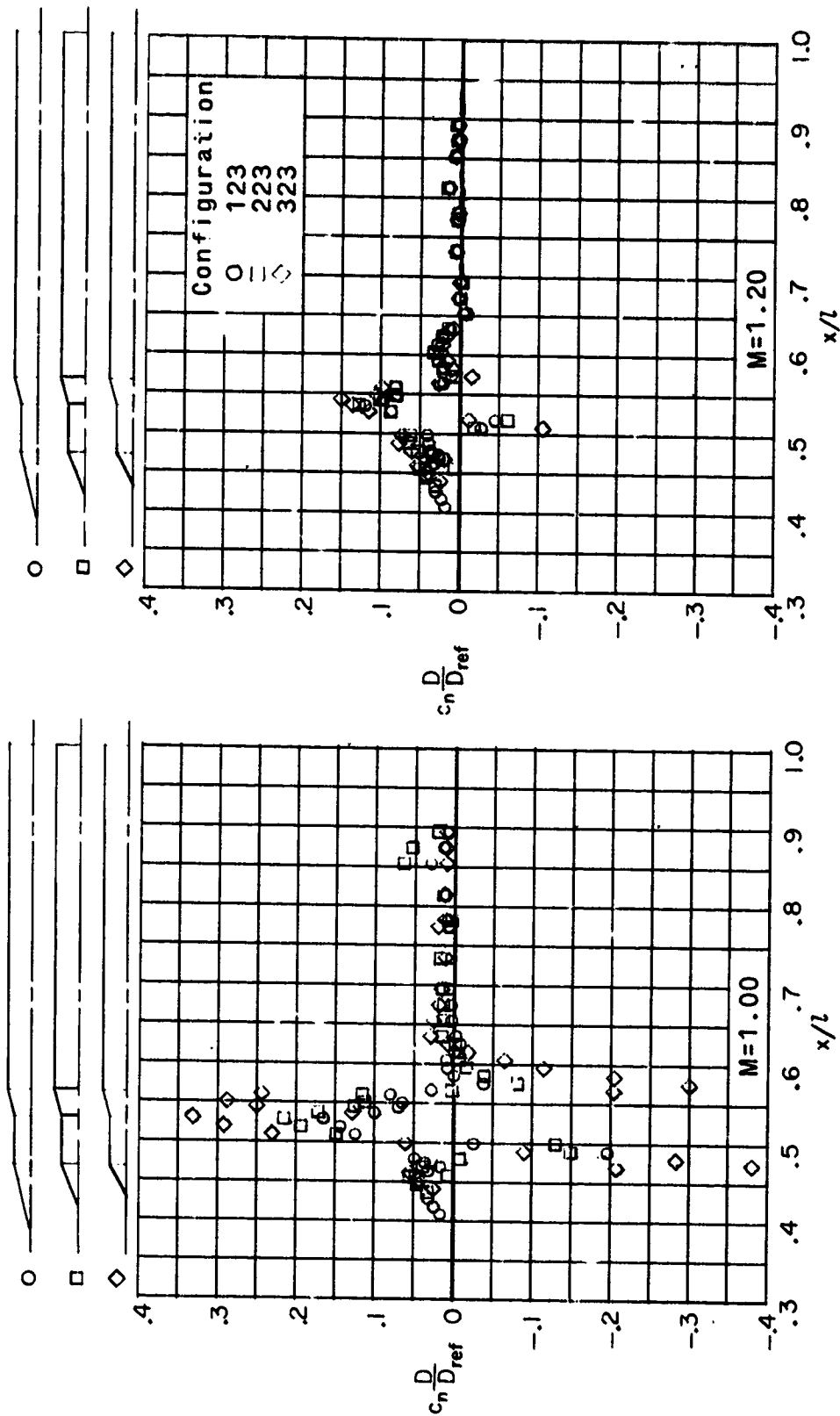
(b) Concluded.

Figure 9.- Continued.



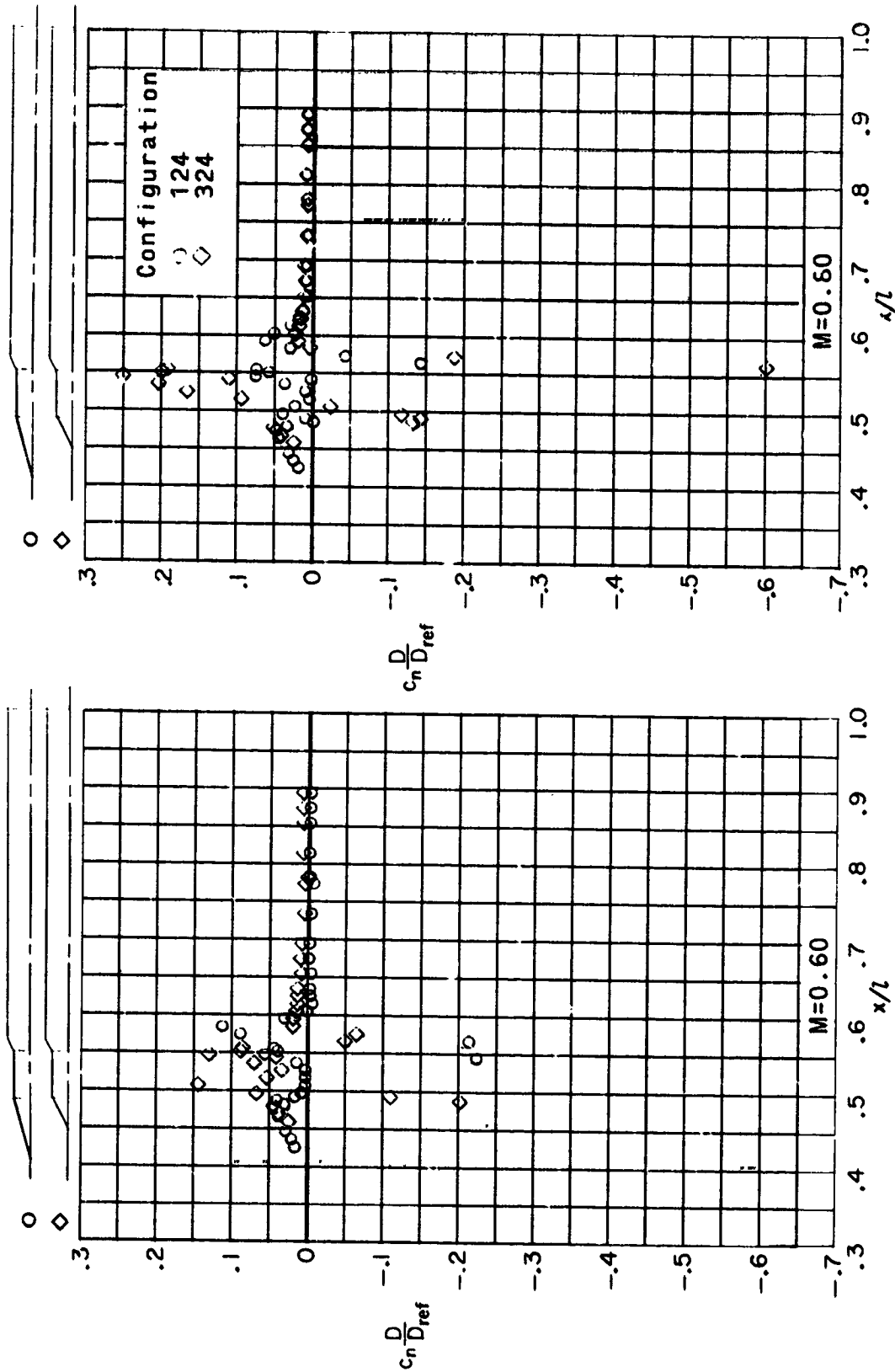
(c) $\delta_P = 15^\circ$.

Figure 9.- Continued.



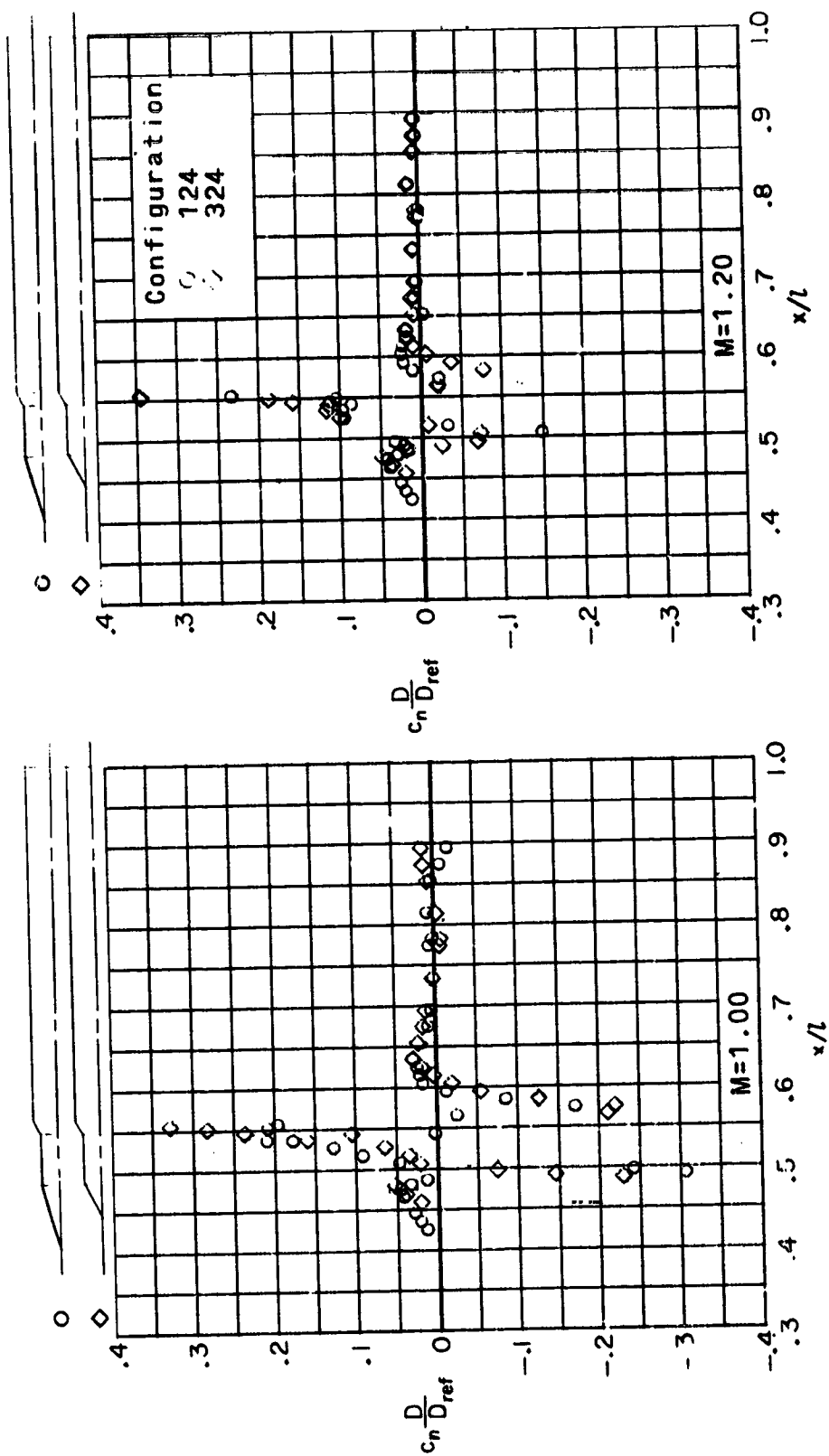
(c) Concluded.

Figure 9.- Continued.



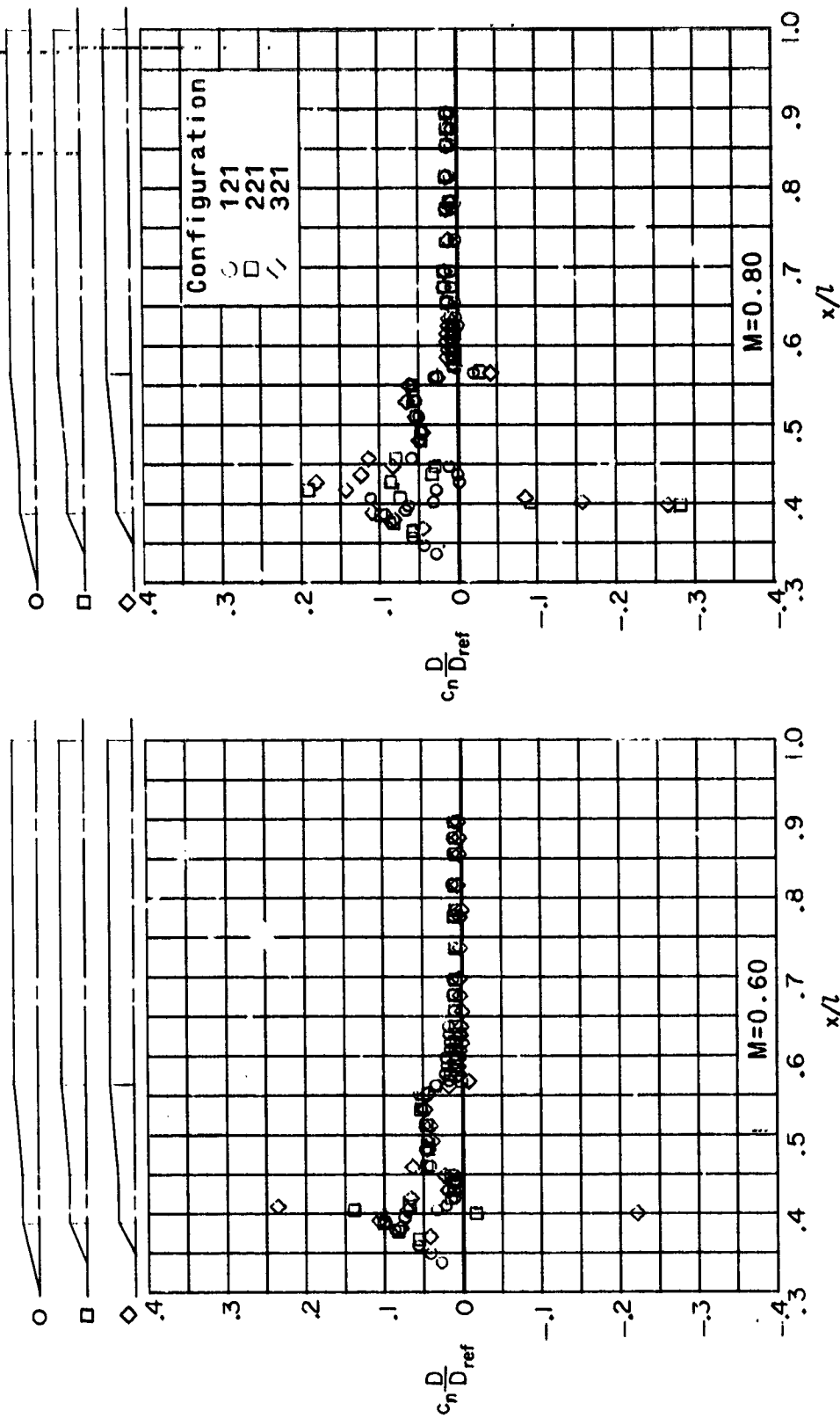
(d) $\delta_P = 30^\circ$.

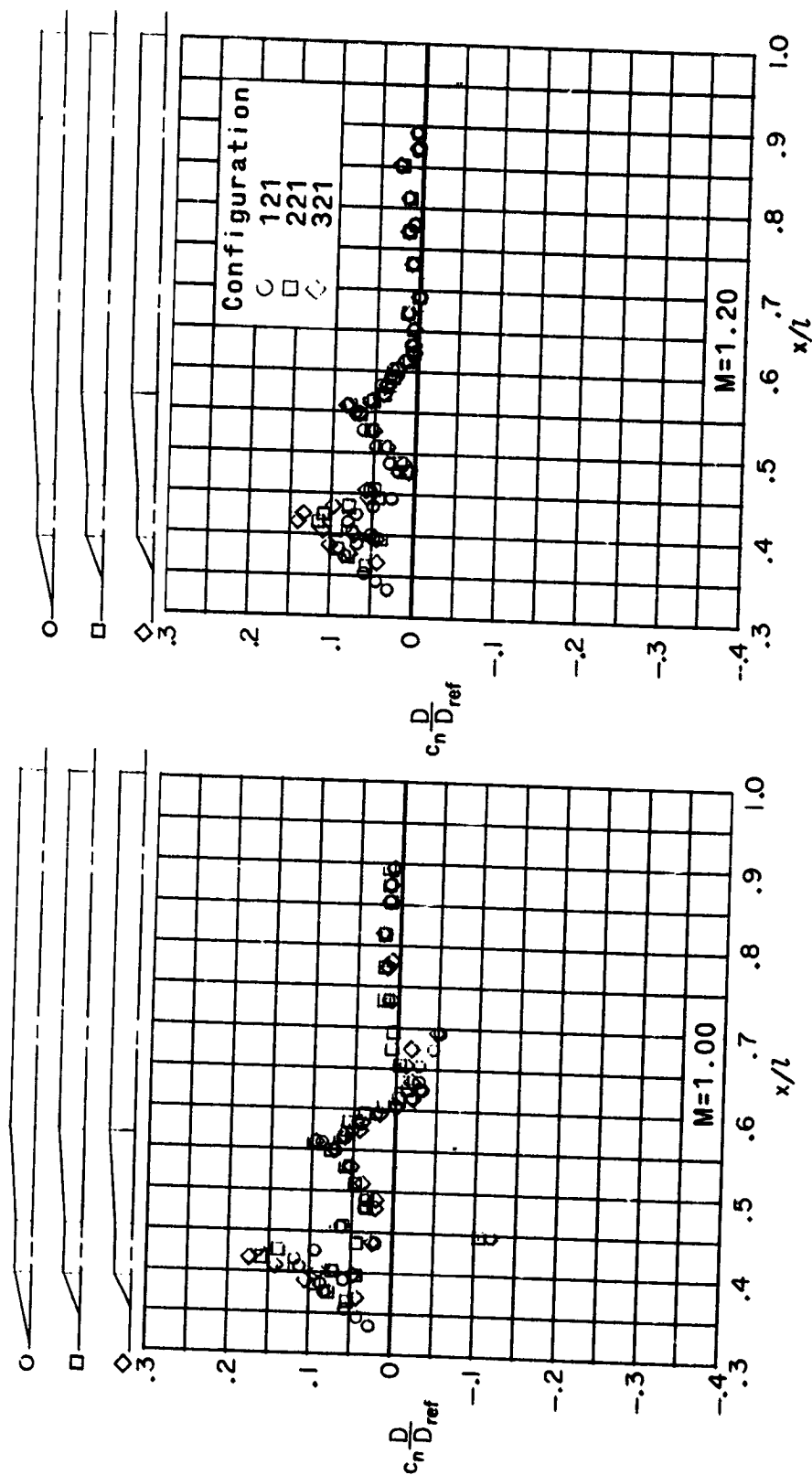
Figure 9.- Continued.



(d) Concluded.

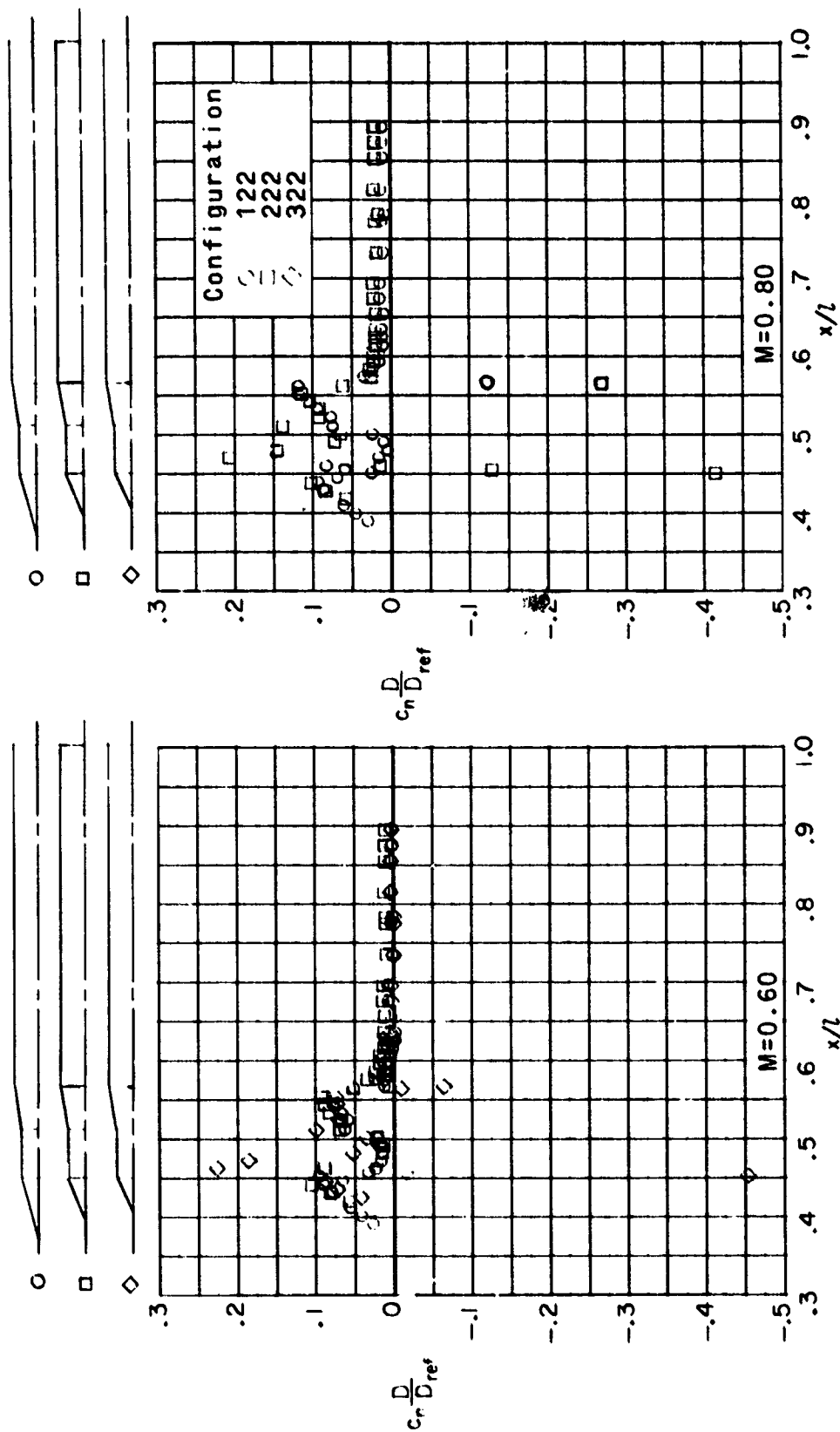
Figure 9.- Concluded.

(a) $\delta_P = 50$ Figure 10.- Effect of variation in nose-cone angle on load distributions at $\alpha = 60^\circ$.



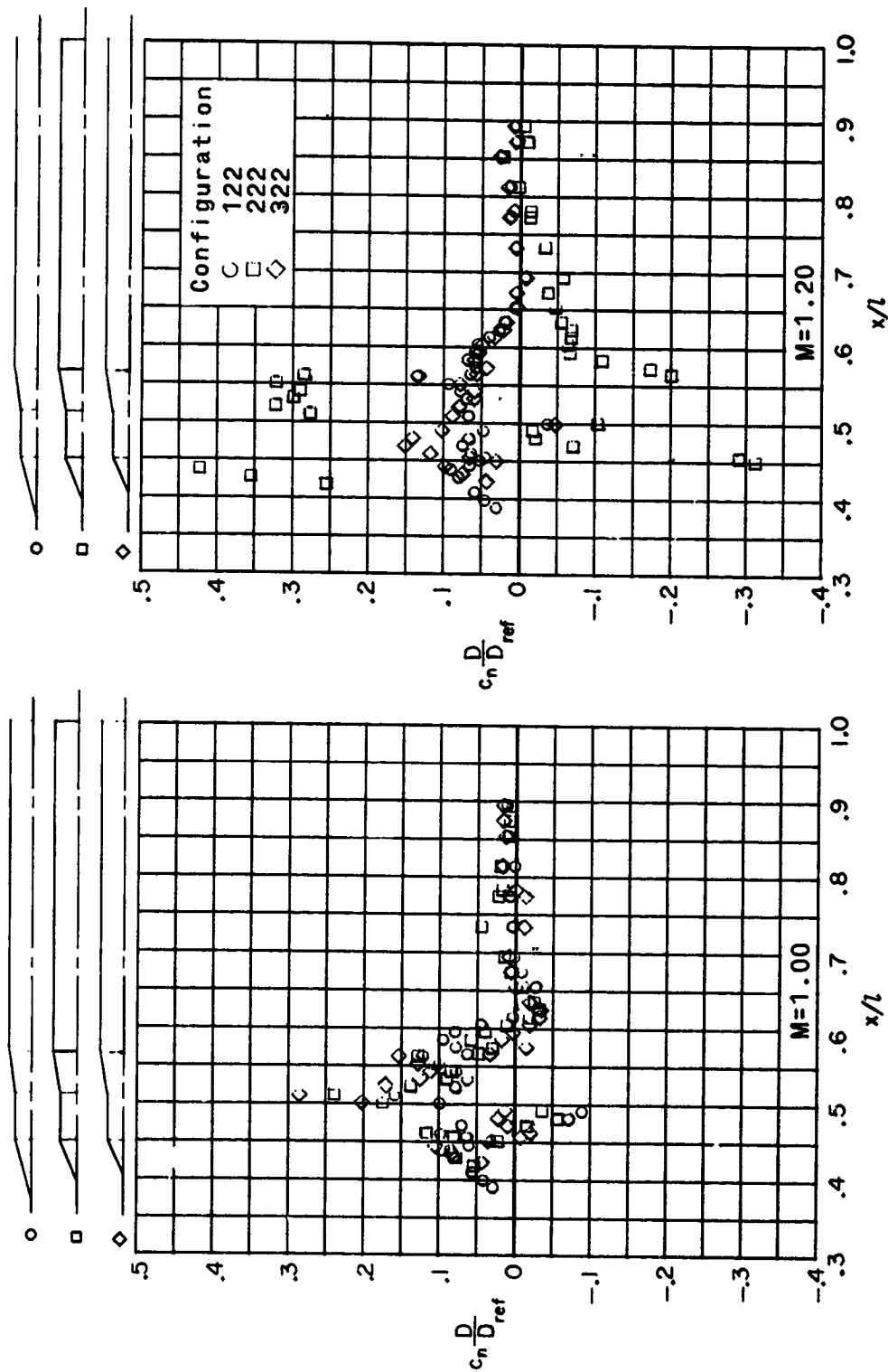
(a) Concluded.

Figure 10.- Continued.



(b) $\delta \bar{p} = 10.1^\circ$.

Figure 10.- Continued.



(b) Concluded.

Figure 10.- Continued.

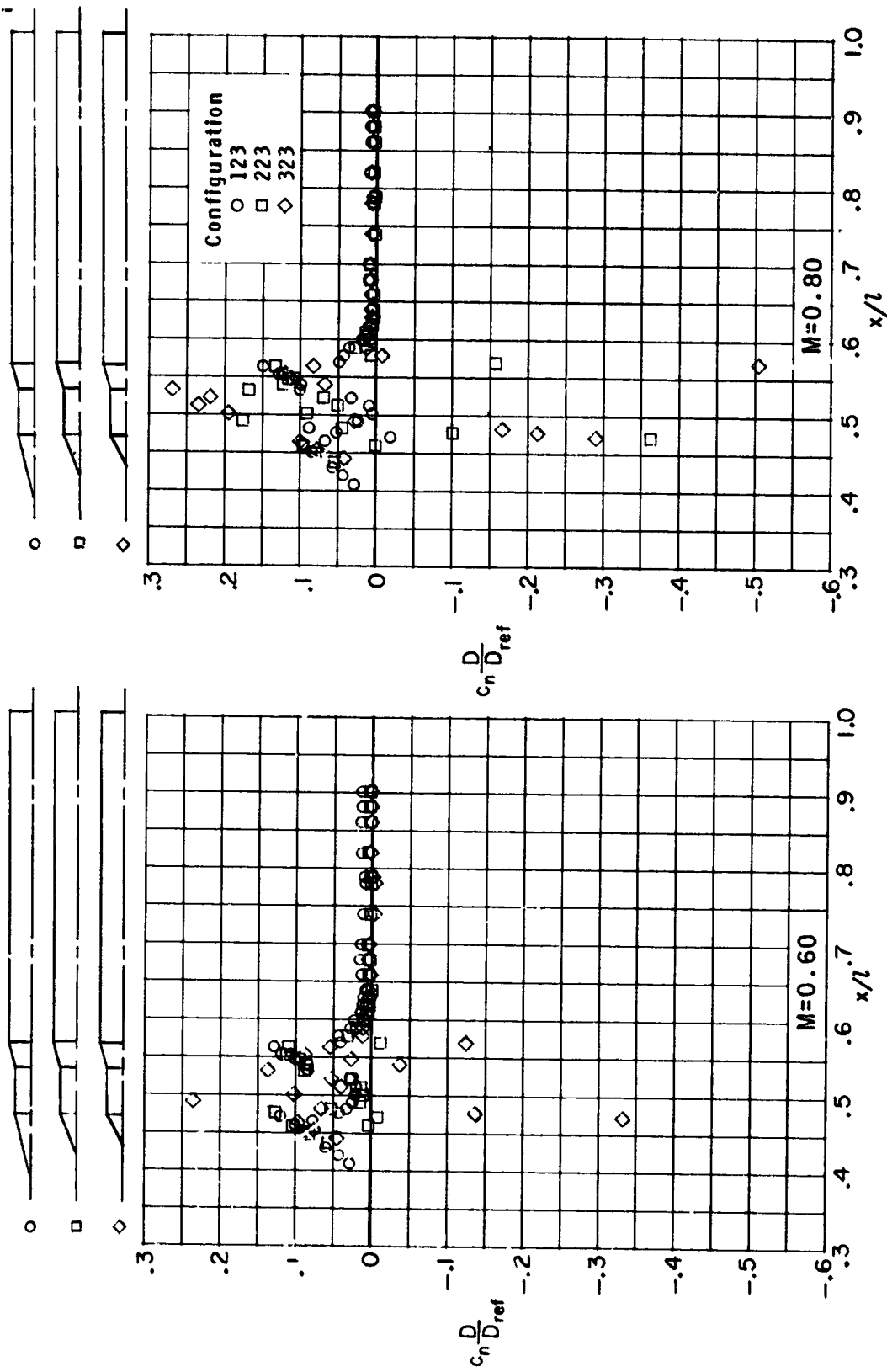
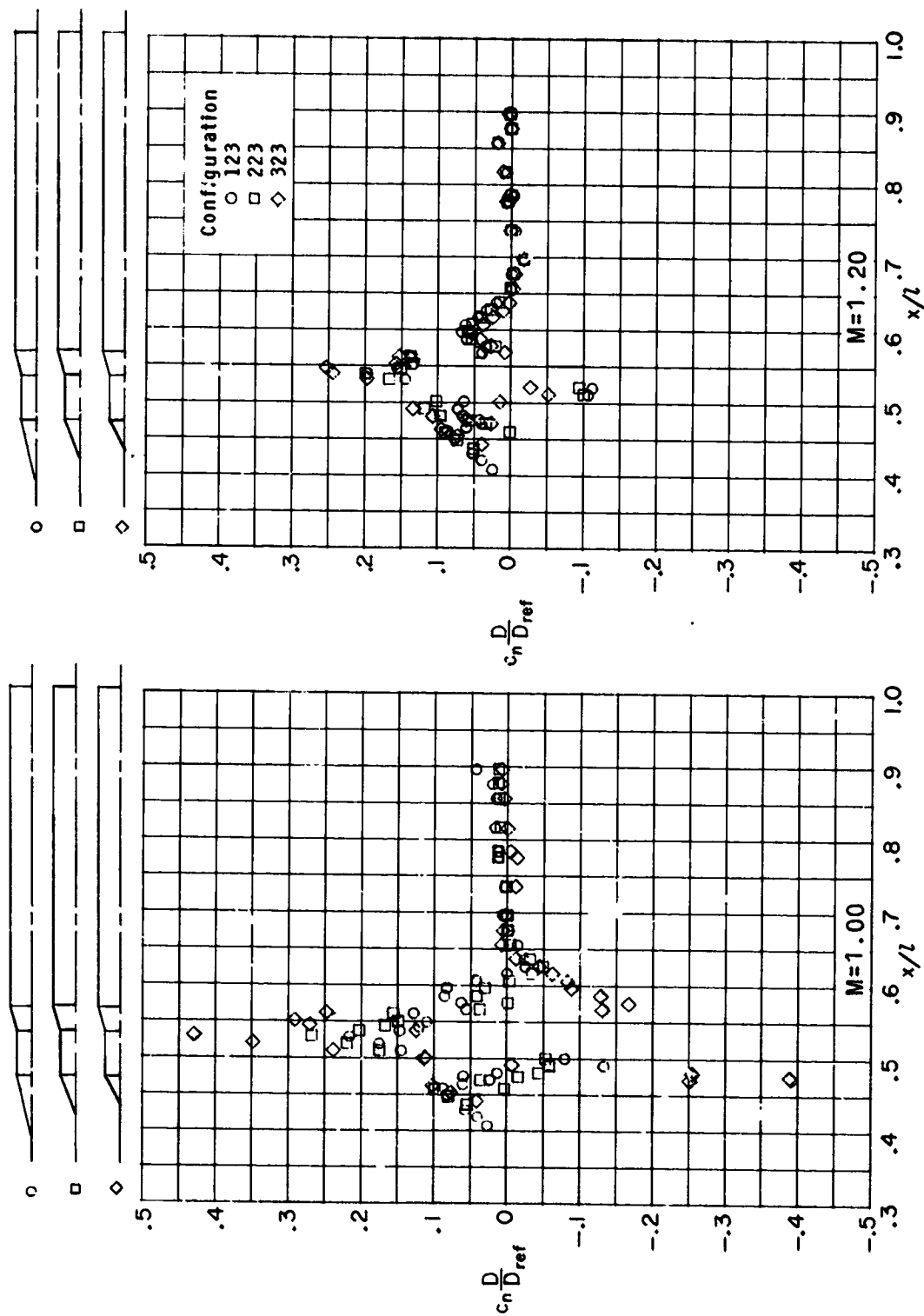
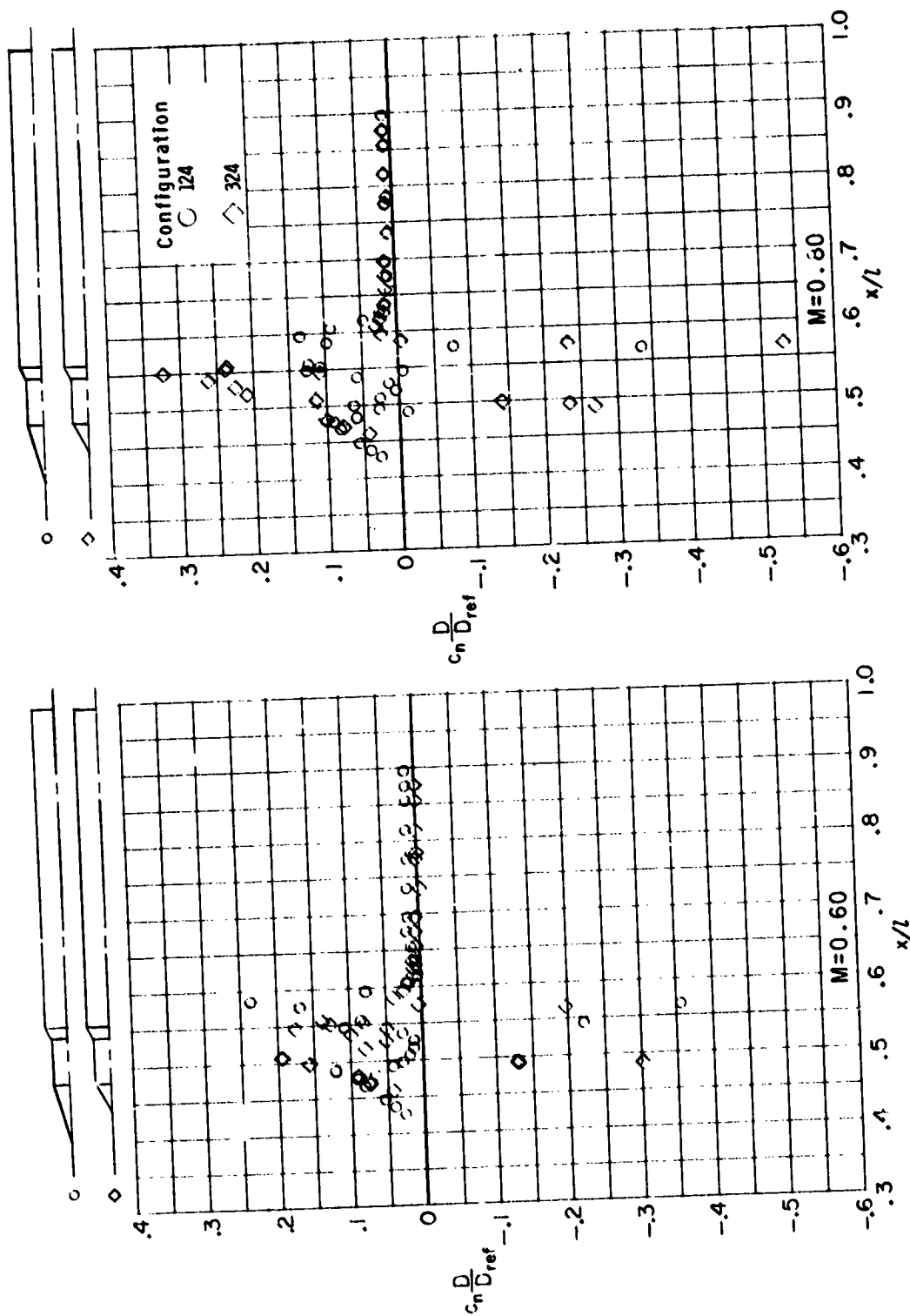
(c) $\delta_F = 15^\circ$.

Figure 10.- Continued.



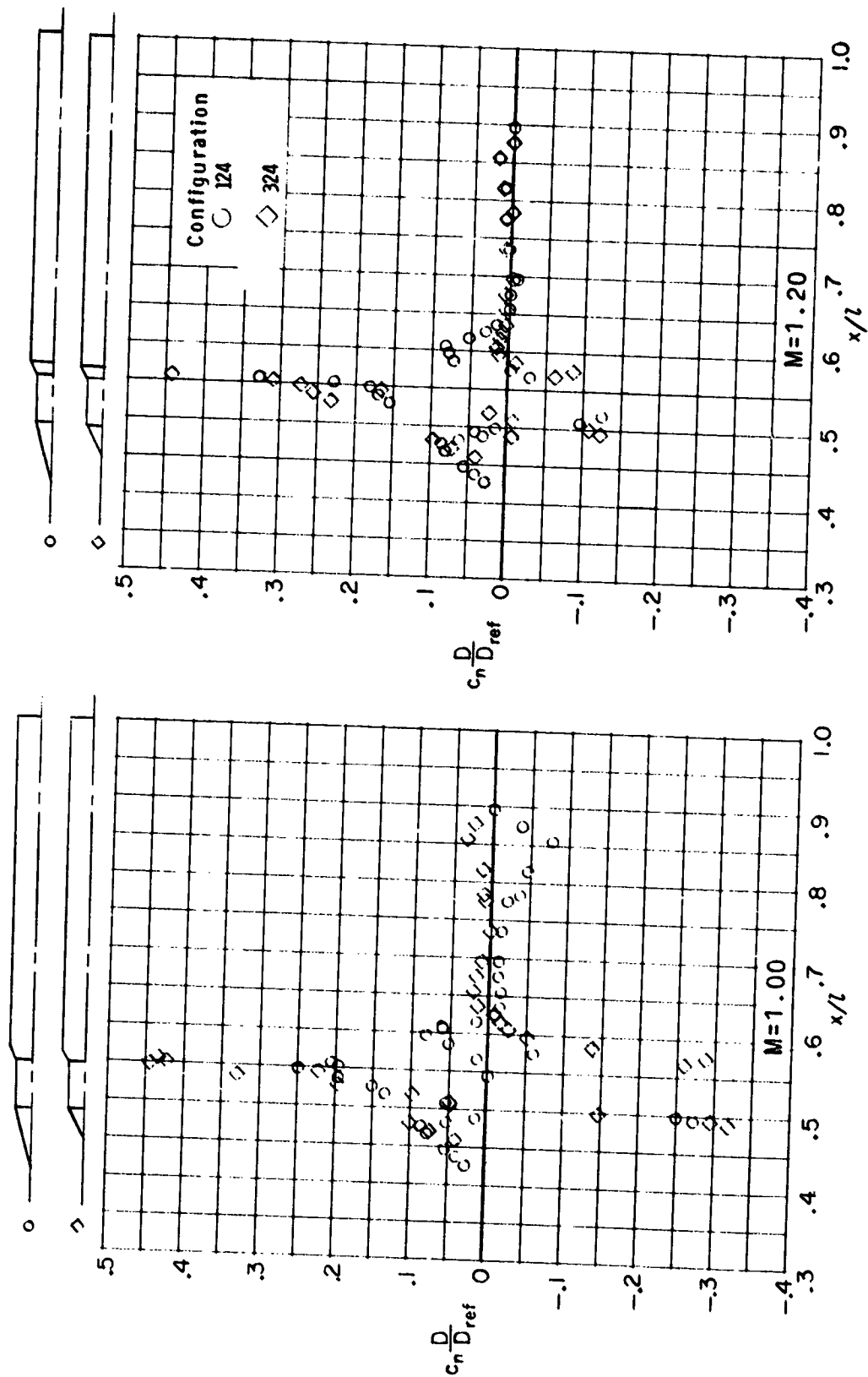
(c) Concluded.

Figure 10.- Continued.



(d) $\delta_F = 30^\circ$.

Figure 10.- Continued.



(d) Concluded.

Figure 10.- Concluded.